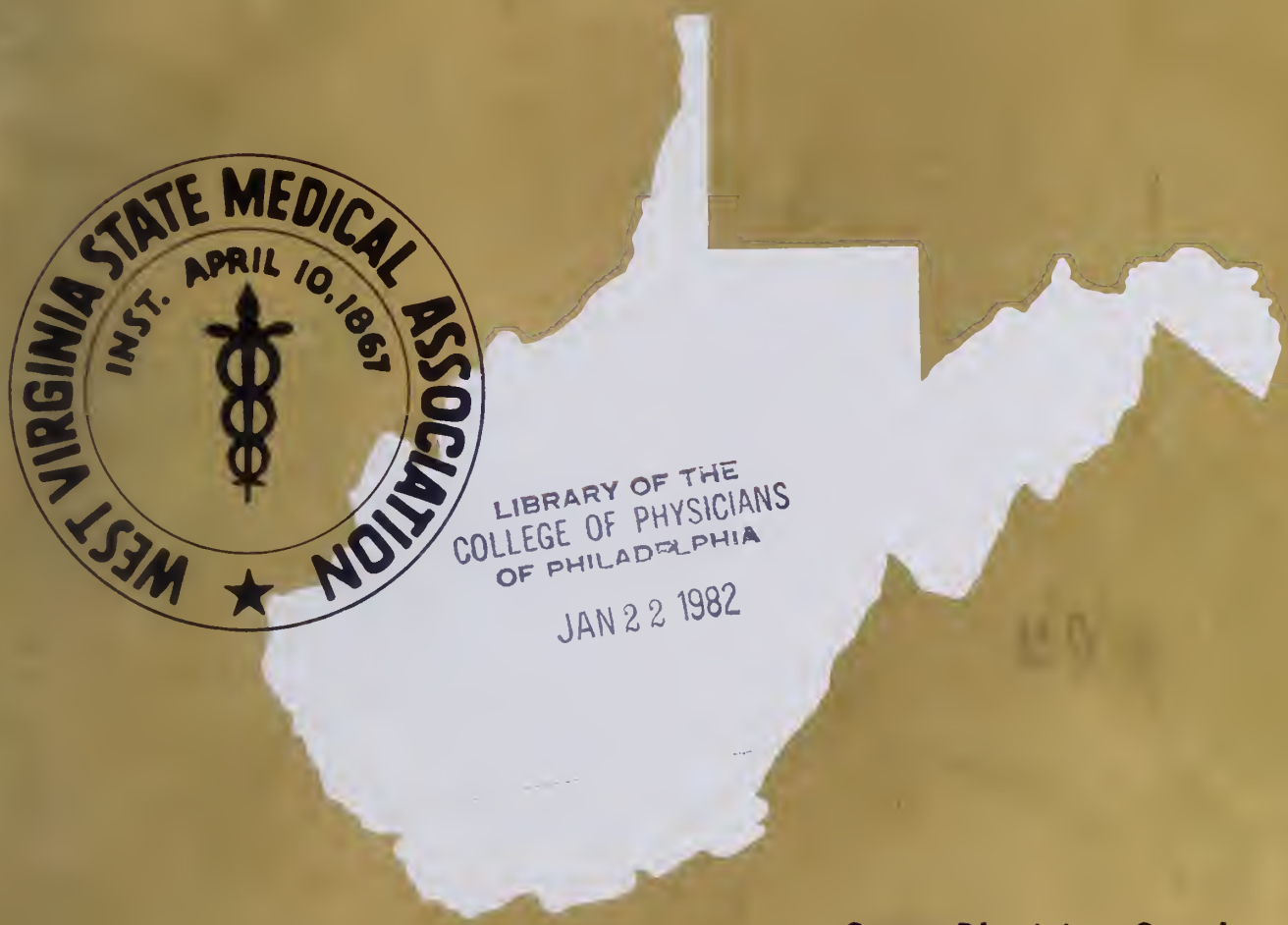
The West Virginia Medical Journal



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Volume 78 Number 1
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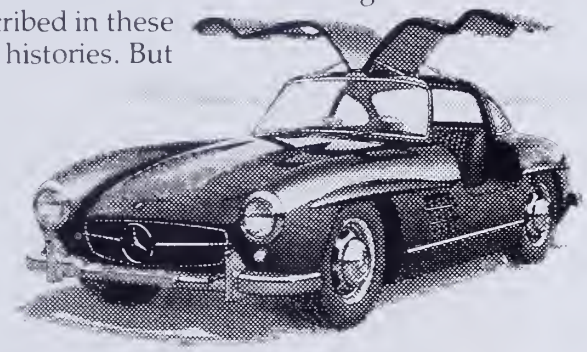

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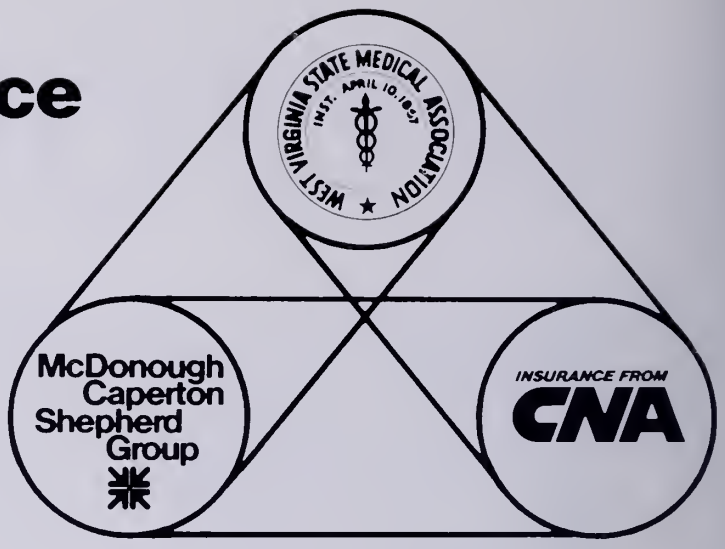

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Tablets

DESCRIPTION

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Phenylephrine Hydrochloride	25 mg
Phenylpropanolamine Hydrochloride	50 mg
Chlorpheniramine Maleate	8 mg
Hyoscyamine Sulfate	0.19 mg
Atropine Sulfate	0.04 mg
Scopolamine Hydrobromide	0.01 mg

Ru-Tuss Tablets act continuously for 10 to 12 hours.

Ru-Tuss Tablets are an oral antihistaminic, nasal decongestant and anti-secretory preparation.

INDICATIONS AND USAGE Ru-Tuss Tablets provide relief of the symptoms resulting from irritation of sinus, nasal and upper respiratory tract tissues. Phenylephrine and phenylpropanolamine combine to exert a vasoconstrictive and decongestive action while chlorpheniramine maleate decreases the symptoms of watering eyes, post nasal drip and sneezing which may be associated with an allergic-like response. The belladonna alkaloids, hyoscyamine, atropine and scopolamine further augment the anti-secretory activity of Ru-Tuss Tablets.

CONTRAINDICATIONS Hypersensitivity to antihistamines or sympathomimetics. Ru-Tuss Tablets are contraindicated in children under 12 years of age and in patients with glaucoma, bronchial asthma and women who are pregnant. Concomitant use of MAO inhibitors is contraindicated.

WARNINGS Ru-Tuss Tablets may cause drowsiness. Patients should be warned of the possible additive effects caused by taking antihistamines with alcohol, hypnotics, sedatives or tranquilizers.

PRECAUTIONS Ru-Tuss Tablets contain belladonna alkaloids, and must be administered with care to those patients with glaucoma, or urinary bladder neck obstruction. Caution should be exercised when Ru-Tuss Tablets are given to patients with hypertension, cardiac or peripheral vascular disease or hyperthyroidism. Patients should avoid driving a motor vehicle or operating dangerous machinery (See Warnings).

OVERDOSAGE Since the action of sustained release products may continue for as long as 12 hours, treatment of overdoses directed at reversing the effects of the drug and supporting the patient should be maintained for at least that length of time. Saline cathartics are useful for hastening evacuation of unreleased medication. In children and infants, antihistamine overdosage may produce convulsions and death.

ADVERSE REACTIONS Hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis, and thrombocytopenia may occur. Other adverse reactions to Ru-Tuss Tablets may be drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, tachycardia, hypotension, hypertension, faintness, dizziness, tinnitus, headache, incoordination, visual disturbances, mydriasis, xerotomia, blurred vision, anorexia, nausea, vomiting, diarrhea, constipation, epigastric distress, hyperirritability, nervousness, dizziness and insomnia. Large overdoses may cause tachypnea, delirium, fever, stupor, coma and respiratory failure.

DOSAGE AND ADMINISTRATION Adults and children over 12 years of age, one tablet morning and evening. Not recommended for children under 12 years of age. Tablets are to be swallowed whole.

HOW SUPPLIED:

Bottles of 100 Tablets	NDC 0524-0058-01
Bottles of 500 Tablets	NDC 0524-0058-05

Federal law prohibits dispensing without prescription.

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MANUFACTURED BY:
Vitarine Company, Inc.
Springfield Gardens, New York 11413

RU-TUSS®

Expectorant

DESCRIPTION

Each fluid ounce of Ru-Tuss Expectorant contains:

Codeine Phosphate	65.8 mg
(WARNING: MAY BE HABIT FORMING)	
Phenylephrine Hydrochloride	30 mg
Phenylpropanolamine Hydrochloride	20 mg
Pheniramine Maleate	20 mg
Pyrilamine Maleate	20 mg
Ammonium Chloride	200 mg
Alcohol	5%

Ru-Tuss Expectorant is an oral antitussive, antihistaminic, nasal decongestant and expectorant preparation.

INDICATIONS AND USAGE Ru-Tuss Expectorant is indicated for symptomatic relief of upper respiratory congestion associated with pharyngitis, tracheitis, bronchitis, and allergic rhinitis. Also, for the temporary relief of symptoms associated with hay fever, allergies, nasal congestion and cough due to the common cold.

CONTRAINDICATIONS Hypersensitivity to antihistamines. Concomitant use of an antihypertensive or antidepressant drug containing a monoamine oxidase inhibitor is contraindicated.

Ru-Tuss Expectorant is contraindicated in patients with glaucoma, bronchial asthma and in women who are pregnant.

WARNINGS Ru-Tuss Expectorant contains codeine phosphate, therefore, the patient should be warned of the potential that this drug may be habit forming. Ru-Tuss Expectorant may cause drowsiness. Patients should be warned of the possible additive effect caused by taking antihistamines with alcohol, hypnotics, sedatives and tranquilizers.

PRECAUTIONS Patients taking Ru-Tuss Expectorant should avoid driving a motor vehicle or operating dangerous machinery (See Warnings). Caution should be taken with patients having hypertension, diabetes, hyperthyroidism and cardiovascular disease.

Caution should also be used in patients with pulmonary, hepatic or renal insufficiency.

ADVERSE REACTIONS Ru-Tuss Expectorant may cause drowsiness, lassitude, giddiness, dryness of mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, tachycardia, hypotension, hypertension, faintness, dizziness, tinnitus, headache, incoordination, visual disturbances, mydriasis, xerostomia, blurred vision, anorexia, nausea, vomiting, diarrhea, constipation, epigastric distress, hyperirritability, nervousness, and insomnia. Overdoses may cause restlessness, excitation, delirium, tremors, euphoria, metabolic acidosis, stupor, tachycardia and even convulsions.

DOSAGE AND ADMINISTRATION Adults: 1 or 2 teaspoonfuls, orally, every 4 hours, not to exceed 10 teaspoonfuls in any 24-hour period.

Children 6 to 12 years of age: ½ the adult dose, not to exceed 6 teaspoonfuls in any 24-hour period. Children 2 to 6 years of age: ½ teaspoonful every 4 hours, not to exceed 3 teaspoonfuls in any 24-hour period. Children under 2 years of age: Use as directed by a physician.

HOW SUPPLIED: (16 fl. oz.)

Pint Bottles	NDC 0524-1010-16

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The West Virginia Medical Journal

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In the treatment of impetigo–

- **100% cure rate with Tegopen®** (cloxacillin sodium)
- **only a 60% cure rate with penicillin V-K**

As seen on admission

After one week of penicillin V-K therapy

Two weeks after initiation of TEGOPEN therapy

Treatment failure was judged to have occurred when lesions increased in size and/or number during the initial week of treatment with penicillin V-K. *No* treatment failures occurred with Tegopen.

*Data on file, Bristol Laboratories.

Brief Summary of Prescribing Information

TEGOPEN®
(cloxacillin sodium)
Capsules and Oral Solution

For complete information, consult Official Package Circular. (12) 9/11/75

INDICATIONS:

Although the principal indication for cloxacillin sodium is in the treatment of infections due to penicillinase-producing staphylococci, it may be used to initiate therapy in such patients in whom a staphylococcal infection is suspected. (See Important Note below.)

Bacteriologic studies to determine the causative organisms and their sensitivity to cloxacillin sodium should be performed.

IMPORTANT NOTE

When it is judged necessary that treatment be initiated before definitive culture and sensitivity results are known, the choice of cloxacillin sodium should take into consideration the fact that it has been shown to be effective only in the treatment of infections caused by pneumococci, Group A beta-hemolytic streptococci, and penicillin G-resistant and penicillin G-sensitive staphylococci. If the bacteriology report later indicates the infection is due to an organism other than a penicillin G-resistant staphylococcus sensitive to cloxacillin sodium, the physician is advised to continue therapy with a drug other than cloxacillin sodium or any other penicillinase-resistant semi-synthetic penicillin.

Recent studies have reported that the percentage of staphylococcal isolates resistant to penicillin G outside the hospital is increasing, approximating the high percentage of resistant staphylococcal isolates found in the hospital. For this reason, it is recommended that a penicillinase-resistant penicillin be used as initial therapy for any suspected staphylococcal infection until culture and sensitivity results are known.

Cloxacillin sodium is a compound that acts through a mechanism similar to that of methicillin against penicillin G-resistant staphylococci. Strains of staphylococci resistant to methicillin have existed in nature and it is known that the number of these strains reported has been increasing. Such strains of staphylococci have been capable of producing serious disease, in some instances resulting in fatality. Because of this, there is concern that widespread use of the penicillinase-resistant penicillins may result in the appearance of an increasing number of staphylococcal strains which are resistant to these penicillins.

Methicillin-resistant strains are almost always resistant to all other penicillinase-resistant penicillins (cross-resistance with cephalosporin derivatives also occurs frequently). Resistance to any penicillinase-resistant penicillin should be interpreted as evidence of clinical resistance to all, in spite of the fact that minor variations in *in vitro* sensitivity may be encountered when more than one penicillinase-resistant penicillin is tested against the same strain of staphylococcus.

CONTRAINDICATIONS:

A history of a previous hypersensitivity reaction to any of the penicillins is a contraindication.

RESULTS OF ORAL THERAPY revealed a high percentage of treatment failures with penicillin V potassium, but *no* failures with Tegopen.

		Given Tegopen® *(cloxacillin sodium)*	Given *penicillin V-K*
Staphylococcus aureus	(78 patients)	39	39
Returned to clinic at one week		29†	38†
Treatment failure at one week		0	18 (47.4%)
Staphylococcus aureus and *Streptococcus pyogenes*	(9 patients)	4	5
Returned to clinic at one week		4	5
Treatment failure at one week		0	2 (40%)
No initial bacterial growth	(14 patients)	9	5
All 14 healed, regardless of which antibiotic was administered.			
Beta-hemolytic *Streptococcus*	(1 patient)	0	1
TOTALS:	**102 patients**	**52 patients**	**50 patients**

†Eleven patients did not return for their one-week checkup These were all called by telephone, and their families reported the lesions had healed One patient was dropped from the study, early, because of adverse reaction to medication.

STUDY: DESCRIPTION/PROTOCOL

- 102 nonselected subjects, with initial bacteriology as follows: 77% *Staphylococcus aureus,* 9% mixed *Staphylococcus aureus* and *Streptococcus pyogenes,* and 1% beta-hemolytic *Streptococcus*.‡
- All patients were given randomized therapy—Tegopen capsules or oral solution, or penicillin V-K tablets or oral solution, in recommended dosages according to body weight.
- All patients were evaluated after one week's therapy. If there was no improvement, therapy was switched to the other antibiotic. The "other antibiotic" proved to be Tegopen 100% of the time because no treatment failures had occurred with Tegopen.
- A final assessment of progress was made two weeks after initiation of Tegopen therapy.

‡The remainder, to equal 100%, consisted of 14 patients (13%) who exhibited no initial bacterial growth. These 14 were all healed, whether given Tegopen or penicillin V-K.

TEGOPEN®
(cloxacillin sodium)
–effective therapy for staph infections of the skin and skin structures

WARNING:

Serious and occasionally fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin therapy. Although anaphylaxis is more frequent following parenteral therapy it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with a history of sensitivity to multiple allergens.

There have been well documented reports of individuals with a history of penicillin hypersensitivity reactions who have experienced severe hypersensitivity reactions when treated with a cephalosporin. Before therapy with a penicillin, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, and other allergens. If an allergic reaction occurs, the drug should be discontinued and the patient treated with the usual agents, e.g., pressor amines, antihistamines, and corticosteroids.

Safety for use in pregnancy has not been established.

PRECAUTIONS:

The possibility of the occurrence of superinfections with mycotic organisms or other pathogens should be kept in mind when using this compound, as with other antibiotics. If superinfection occurs during therapy, appropriate measures should be taken.

As with any potent drug, periodic assessment of organ system function, including renal, hepatic, and hematopoietic, should be made during long-term therapy.

ADVERSE REACTIONS:

Gastrointestinal disturbances, such as nausea, epigastric discomfort, flatulence, and loose stools, have been noted by some patients. Mildly elevated SGOT levels (less than 100 units) have been reported in a few patients for whom pretherapeutic determinations were not made. Skin rashes and allergic symptoms, including wheezing and sneezing, have occasionally been encountered. Eosinophilia, with or without overt allergic manifestations, has been noted in some patients during therapy.

USUAL DOSAGE:

Adults: 250 mg. q.6h.

Children: 50 mg./Kg./day in equally divided doses q.6h. Children weighing more than 20 Kg. should be given the adult dose. Administer on empty stomach for maximum absorption.

N.B.: INFECTIONS CAUSED BY GROUP A BETA-HEMOLYTIC STREPTOCOCCI SHOULD BE TREATED FOR AT LEAST 10 DAYS TO HELP PREVENT THE OCCURRENCE OF ACUTE RHEUMATIC FEVER OR ACUTE GLOMERULONEPHRITIS.

SUPPLIED:

Capsules—250 mg. in bottles of 100. 500 mg. in bottles of 100.
Oral Solution—125 mg./5 ml. in 100 ml. and 200 ml. bottles.

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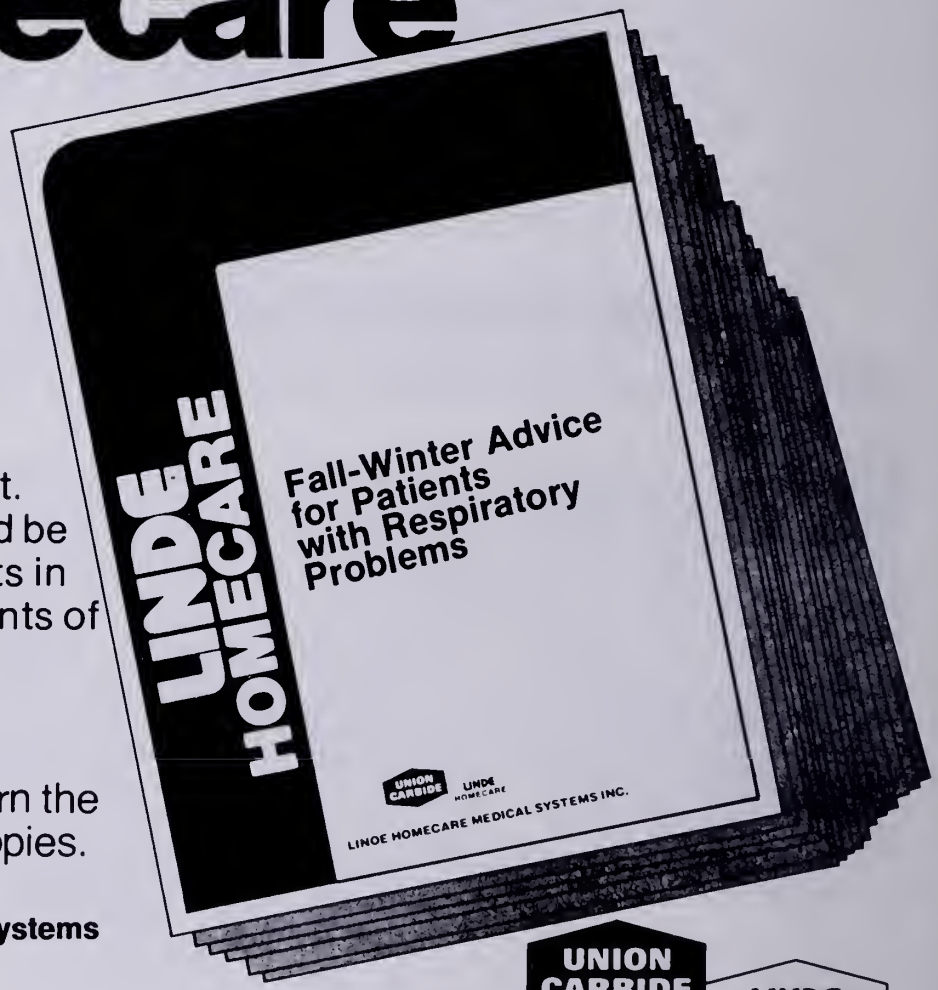

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Compared to amoxicillin

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. . . in infants and children

Cyclapen®-W (cyclacillin) produces twice the peak serum concentration* (15.6 mcg/ml versus 7.3 mcg/ml) in half the time (30 minutes versus 60 minutes).[1]

Cyclapen®-W is just as effective in otitis media and streptococcal tonsillopharyngitis†.[2]

Cyclapen®-W produces a significantly lower incidence of the most common side effect, diarrhea.[2]

CYCLAPEN®-W

(cyclacillin) Tablets/Suspension

Rapid onset of action with fewer side effects.

*Rapidly excreted unchanged in urine. Clinical efficacy may not always correlate with blood levels.
†Due to susceptible organisms.

1. Ginsburg CM, McCracken GH Jr, Zweighaft TC, Clahsen JC. Comparative pharmacokinetics of cyclacillin and amoxicillin in infants and children. *Antimicrob Ag Chemother* 19:1086-1088 (June) 1981
2. Multicenter trials. Data to be published.

See important information on page after next.

Compared to ampicillin

Faster peak. Fewer problems.

. . . in adults and children

Cyclapen®-W (cyclacillin) produces peak serum concentrations* almost four times higher and over one hour earlier.[3]

Cyclapen®-W is just as effective in otitis media, bronchitis, pneumonia, urinary tract infections and infections of skin and skin structures†.[3]

Cyclapen®-W produces a significantly lower incidence of diarrhea and skin rash.[3]

CYCLAPEN®-W

(cyclacillin) Tablets/Suspension

Rapid onset of action with fewer side effects.

*Rapidly excreted unchanged in urine. Clinical efficacy may not always correlate with blood levels.
†Due to susceptible organisms.
3. Data on file. Wyeth Laboratories.
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See important information on adjoining page.

Wyeth Laboratories
Philadelphia, Pa 19101

Cyclapen®-W (cyclacillin)

Indications
Cyclacillin has less in vitro activity than other drugs in the ampicillin class and its use should be confined to these indications: Treatment of the following infections:

RESPIRATORY TRACT
Tonsillitis and pharyngitis caused by Group A beta-hemolytic streptococci
Bronchitis and pneumonia caused by S. pneumoniae (formerly D. pneumoniae)
Otitis media caused by S. pneumoniae (formerly D. pneumoniae) and *H. influenzae*
Acute exacerbation of chronic bronchitis caused by *H. influenzae**
*Though clinical improvement has been shown, bacteriologic cures cannot be expected in all patients with chronic respiratory disease due to *H. influenzae*.

SKIN AND SKIN STRUCTURES (integumentary) infections caused by Group A beta-hemolytic streptococci and staphylococci, non-penicillinase producers.

URINARY TRACT INFECTIONS caused by *E. coli* and *P. mirabilis*. (This drug should not be used in any *E. coli* and *P. mirabilis* infections other than urinary tract.)

NOTE: Perform cultures and susceptibility tests initially and during treatment to monitor effectiveness of therapy and susceptibility of bacteria. Therapy may be instituted prior to results of sensitivity testing

Contraindications Contraindicated in individuals with history of an allergic reaction to penicillins.

Warnings **Cyclacillin should only be prescribed for the indications listed herein.**

Cyclacillin has less in vitro activity than other drugs of the ampicillin class. However, clinical trials demonstrated it is efficacious for recommended indications.

Serious and occasional fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin. Although anaphylaxis is more frequent following parenteral use, it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with history of sensitivity to multiple allergens. There are reports of patients with history of penicillin hypersensitivity reactions who experienced severe hypersensitivity reactions when treated with a cephalosporin. Before penicillin therapy, carefully inquire about previous hypersensitivity reactions to penicillins, cephalosporins and other allergens. If allergic reaction occurs, discontinue drug and initiate appropriate therapy. Serious anaphylactoid reactions require immediate emergency treatment with epinephrine. Oxygen, I.V. steroids, airway management, including intubation, should also be administered as indicated.

Precautions Prolonged use of antibiotics may promote overgrowth of nonsusceptible organisms. If superinfection occurs, take appropriate measures.

PREGNANCY: Pregnancy Category B Reproduction studies performed in mice and rats at doses up to 10 times the human dose revealed no evidence of impaired fertility or harm to the fetus due to cyclacillin. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, use this drug during pregnancy only if clearly needed.

NURSING MOTHERS: It is not known whether this drug is excreted in human milk. Because many drugs are, exercise caution when cyclacillin is given to a nursing woman.

Adverse Reactions Oral cyclacillin is generally well tolerated. As with other penicillins, untoward sensitivity reactions are likely, particularly in those who previously demonstrated penicillin hypersensitivity or with history of allergy, asthma, hay fever, or urticaria Adverse reactions reported with cyclacillin: diarrhea (in approximately 1 out of 20 patients treated), nausea and vomiting (in approximately 1 in 50), and skin rash (in approximately 1 in 60). Isolated instances of headache, dizziness, abdominal pain, vaginitis, and urticaria have been reported. (See WARNINGS) Other less frequent adverse reactions which may occur and are reported with other penicillins are anemia, thrombocytopenia, thrombocytopenic purpura, leukopenia, neutropenia and eosinophilia. These reactions are usually reversible on discontinuation of therapy.

As with other semisynthetic penicillins, SGOT elevations have been reported

As with antibiotic therapy generally, continue treatment at least 48 to 72 hours after patient becomes asymptomatic or until bacterial eradication is evidenced. In Group A beta-hemolytic streptococcal infections, at least 10 days' treatment is recommended to guard against risk of rheumatic fever or glomerulonephritis. In chronic urinary tract infection, frequent bacteriologic and clinical appraisal is necessary during therapy and possibly for several months after. Persistent infection may require treatment for several weeks.

Cyclacillin is not indicated in children under 2 months of age.

Patients with Renal Failure Cyclacillin may be safely administered to patients with reduced renal function. Due to prolonged serum half-life, patients with various degrees of renal impairment may require change in dosage level (see DOSAGE AND ADMINISTRATION in package insert).

Dosage (Give in equally spaced doses)

INFECTION	ADULTS	CHILDREN*
Respiratory Tract		
Tonsillitis & Pharyngitis	250 mg q.i.d.	body weight < 20 kg (44 lbs) 125 mg q.i.d. body weight > 20 kg (44 lbs) 250 mg q.i.d.
Branchitis and Pneumonia		
Mild or Moderate Infections	250 mg q.i.d.	50 mg/kg/day q.i.d.
Chronic Infections	500 mg q.i.d.	100 mg/kg/day q.i.d.
Otitis Media	250 mg to 500 mg q.i.d.†	50 to 100 mg/kg/day†
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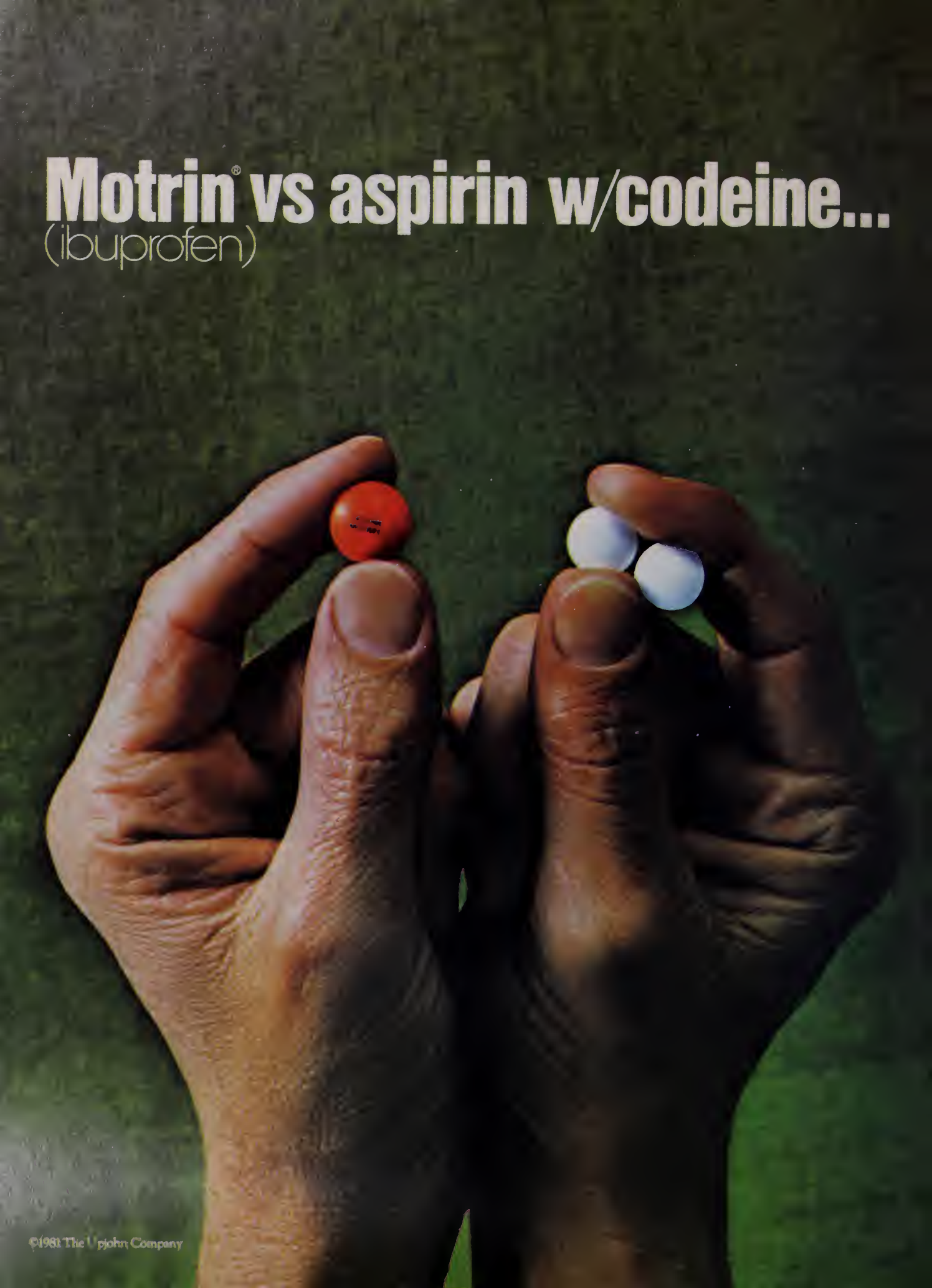

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compare the analgesic effect

A *Motrin* 400 mg dose relieved postsurgical dental pain as effectively as a combination of 650 mg aspirin and 60 mg codeine (two aspirin-with-codeine No. 3 tablets) in a study of 129 patients. In this double-blind, placebo-controlled, randomized study, no statistically significant difference in relief of pain was noted at 1, 2, and 4 hours between the *Motrin* and aspirin-with-codeine groups... with *Motrin* being significantly more effective ($p = 0.03$) at the three-hour interval. Active treatment was significantly more effective ($p < 0.0001$) than placebo at all time intervals.

Comparison of pain relief
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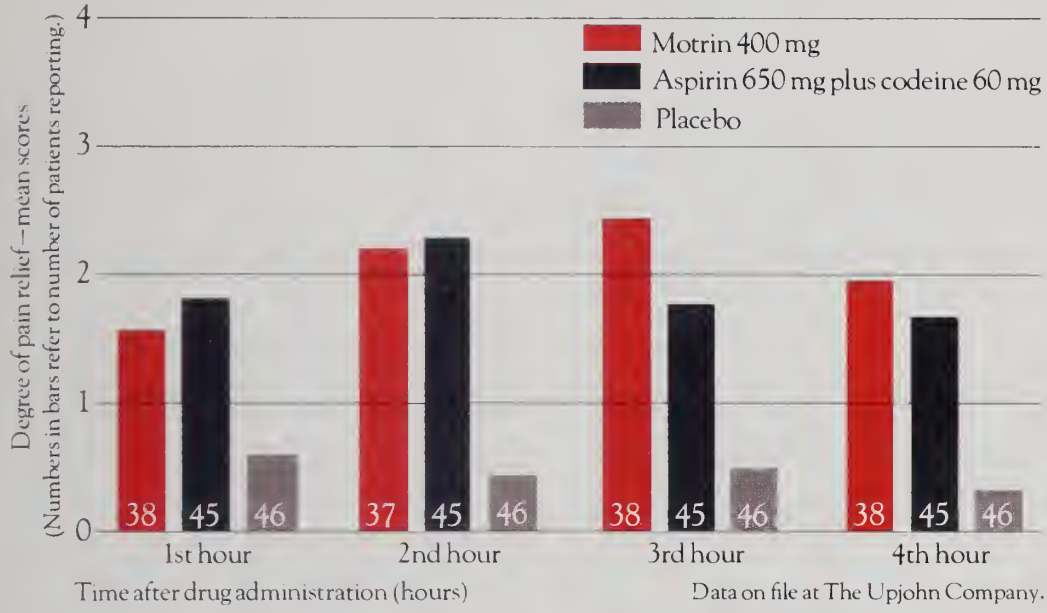

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• Not a narcotic • Not addictive • Not habit forming • Nonscheduled • Acts peripherally • Relieves pain rapidly • Relieves inflammation • Indicated in acute and chronic pain • Well tolerated (The most common side effect with *Motrin* is mild gastrointestinal disturbance.)

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Motrin® (ibuprofen)
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Warnings: Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

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Incidence greater than 1%

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*Incidence 3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

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MARCH 1981

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ARTHRITIS FOUNDATION

The West Virginia Medical Journal

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Special Article

The Supply Of Medical Doctors In West Virginia: Past Trends And A Projection

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An assessment of West Virginia's manpower development efforts in the area of medical and graduate medical education should be undertaken now. The authors suggest that this study can serve as the starting point toward an effective manpower plan which can avoid costly future mistakes.

Findings by the Office of Health Services Research (OHSR), Department of Community Medicine, West Virginia University, Morgantown, indicate that the state's physician supply has grown 41 per cent since 1972 and is expected to grow an additional 23 per cent by 1990. Over half the increase expected between 1980 and 1990 will be in the primary care areas, and the overall 1990 supply will be comprised of younger doctors. Additionally, the projection indicates declines in some surgical specialties in the 1990s.

The paper concludes with a call for assessment of the current and future physician supply using data produced by the Graduate Medical Education National Advisory Committee.

While the seventies were a decade of development for medical care and medical education resources in West Virginia, the eighties will be a time for difficult policy decisions on these issues. Though the Federal government and the nation as a whole appear to be reducing support for medical education programs, West Virginia has continued to pursue an aggressive development strategy. The addition of two medical schools, the establishment of a major clinical campus in Charleston and significant expansion of in-state graduate medical education opportunities during the 1970s represent a substantial commitment to adequate medical resources for the state.

These investments, whether privately or publicly financed, are significant, and their impacts will become increasingly apparent during this decade. Now is the time to assess our current directions in medical education. The initial step in this assessment is to examine the current supply of physicians in West Virginia and to project the composition of the supply in 1990.

This study, prepared by the Office of Health Services Research (OHSR), Department of Community Metdicine, West Virginia University, Morgantown, brings together a range of data concerning medical specialties in West Virginia, and forecasts the State's 1990 physician population. The analytical methodology is presented, followed by a discussion of the study findings.

Forecasts are, of course, tentative, but they provide a basis for thoughtful consideration of the future.

Methodology

The projection method used in this study is an analysis of stocks and flows. Stocks are accumulations or inventories of items at defined

points in a system. The quantity of items in a stock is equal to the difference between the numbers of items moving into and out of the stock. Stocks are arranged in a series so that the items moving out of one stock flow into the next one. The movement, or flow, of items from one stock to the next defines the rate of exchange between the two stocks. For example, the flow of physicians out of the category of graduate medical education (a stock) into the category of practicing physicians (another stock), occurs at a measurable rate (e.g., persons per year).

The basic stocks in this study are the populations of physicians practicing in West Virginia during a given year and during subsequent years. Additional stocks include physicians immigrating to and emigrating from West Virginia, and West Virginia graduate medical education (GME) residents. The stock of emigrating physicians (out-migration) includes all those leaving practice in the state (including, for example, moving out of the state, retirement, and death).

The basic flows in the study are rates of movement of physicians into and out of West Virginia. Migration rates of physicians by age and specialty have been tracked since 1976, and the four-year averages for both in-migration and out-migration have been calculated. These rates are assumed to be constant through 1989. Because in-migration accounts only for physicians who were not practicing in West Virginia during the previous year, those entering the physician stock from West Virginia residency programs are accounted for through the GME residents flow.

The initial basic stock is a table (an age-by-specialty matrix) of practicing medical doctors for 1980. The flows have been determined by historical empirical data provided by sources identified below. The flows from the initial stock will be combined with those from in-migration, out-migration, and West Virginia graduate medical education residents to produce a net quantity of practicing physicians, distributed by age and specialty, for 1981 (the subsequent basic stock). The procedure is reiterated for each year until the target year is reached (1990 for this projection).

Secondary Sources

Most of the data used in this study were obtained from secondary sources. The State Health Department, Board of Medicine and West Virginia University's Administrative Systems Group provided data concerning permanently-licensed medical doctors and graduate training programs. Information about current and future residency programs was obtained in cooperation with the West Virginia Joint Council on Teaching Hospitals. The residency program data from both the West Virginia University's Tracking System and the Joint Council survey were used to calculate a series of factors which were incorporated into the GME component of the flow model.

Because all the residency positions identified are not filled, fill rates reflecting 1971-1978 trends are calculated. The rates are further adjusted to account for major programmatic changes in recent years.

To reflect the observation that the number of persons completing residencies usually is not the same as the number of persons entering the program, completion rates are incorporated into the model. These rates are based on seven years of residency-tracking data.

Finally, not all those who complete residencies in West Virginia stay to practice in the State. Retention rates, based on nine years of data, are determined and adjusted for those programs exhibiting major changes in recent years.

Stock of Residents

After applying the series of adjustments to the initial residency stock of all GME residents in programs in the state, the result is a matrix revealing the stock of residents expected to enter the West Virginia physician stock annually from 1981 to 1990. These physicians are added during each iteration of the basic model.

To summarize the model, in-migration is added to and out-migration is subtracted from the 1980 practicing physician stock on a specialty-specific basis to yield a 1981 physician stock sub-total. Including the 1981 GME residents leads to the 1981 physician stock. The stock is then age-adjusted and the process reiterated. The 1990 projections are produced after nine iterations.

This methodology begins with physicians entering the physician stock through either in-migration or in-state residencies. It does not directly examine the impact of a specific medical school action. While the number of GME positions in the state may *not* be dramatically increased by such events (increasing medical doctors positions), the characteristics of the persons filling those positions may change (for example, fewer foreign medical graduates and more West Virginia-trained physicians). These factors are incorporated into the model through adjustments to the completion and retention rates. Moreover, since virtually all medical school graduates do enter graduate training programs,

the survey of program directors should account for future specialty growth.

An additional limitation is that only permanently-licensed medical doctors are included. Some 230 temporarily-licensed physicians (1980) and more than 80 doctors of osteopathy are excluded. The temporarily-licensed doctors, primarily residents in training, are partially accounted for in the GME flow model. In interpreting the data, however, one should be aware of these limitations and realize that the projections are probably conservative.

Findings

The Base Period, 1972-1980:

In 1972, as many as 1593 medical doctors were practicing actively in West Virginia. By 1976, the number had risen to 2165 (a 36-per cent increase), and was to reach 2245 by 1980 (about 3.7 per cent more than in 1976).

The national trend of the seventies toward increased specialization also was observed in West Virginia. Between 1972 and 1980, while all other specialties were increasing their relative proportions of total active doctors, general/family practice declined from 28.7 per cent of all active M.D.s to 19.0 per cent, and general surgery declined from 11.2 per cent to 10.1 per cent.

The changes were not uniform throughout the period, however, nor among the specialties.

Table 1, showing the distribution of M.D.s by specialty, reveals the extent of change from 1972 to 1980. Extraordinary growth is indicated for some specialties (anesthesiology, neurology, and otolaryngology, for example), although the rates of change generally reflect a slow-down in growth over the latter four years of the decade. In some specialties (general surgery and orthopedic surgery, for example) growth between 1972 and 1976 became decline between 1976 and 1980.

General Physician Population, 1980-1990:

OHSR projections show a rise in the total number of doctors practicing in West Virginia from 2245 in 1980 to 2448 in 1985 (up 9 per cent), increasing to 2770 (an additional 13 per cent) by 1990. The current (1980) distribution of physicians by specialty and the projected arrays for 1985 and 1990 also appear in Table 1.

Specialty groups showing higher growth rates relative to other specialties are internal medicine, psychiatry, pathology, and otolaryngology; those showing decline in their relative shares of the physician total are general surgery, orthopedic surgery, pediatrics, and radiology. The anticipated increases in numbers of physicians are expected to be greatest for family practice and internal medicine (103 and 101, respectively), while the greatest percentage increases are expected in psychiatry, neurology and otolaryngology (84, 50, and 48 per cent, respectively).

TABLE 1

Actual (1972, 1976, 1980) and Projected (1985, 1990) Number and Percentage Distribution of Active Permanently-Licensed Medical Doctors in West Virginia, By Specialty

	1972 Actual		*1976 Actual*		*1980 Actual*		*1985 Projected*		*1990 Projected*	
Specialty	*Number*	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*
Anesthesiology	22	1.4	62	2.9	65	2.9	77	3.1	86	3.1
Dermatology	15	.9	24	1.1	22	1.0	19	.8	20	.7
General/Family Practice	457	28.7	458	21.2	427	19.0	449	18.3	530	19.1
General Surgery	179	11.2	248	11.5	227	10.1	217	8.9	207	7.5
Internal Medicine	176	11.1	283	13.1	329	14.7	374	15.2	430	15.5
Neurosurgery	12	.7	17	.8	18	.8	22	.9	24	.9
Neurology	6	.4	20	.9	24	1.1	29	1.2	36	1.3
Ob/Gyn	75	4.7	136	6.3	139	6.2	151	6.2	168	6.1
Ophthalmology	35	2.2	64	2.9	71	3.2	74	3.0	83	3.0
Orthopedic Surgery	51	3.2	83	3.8	77	3.4	68	2.8	59	2.1
Otolaryngology	15	.9	33	1.5	46	2.0	57	2.3	68	2.5
Pathology	44	2.8	88	4.1	99	4.4	119	4.9	138	5.0
Pediatrics	66	4.1	130	6.0	133	5.9	141	5.8	153	5.5
Psychiatry	35	2.2	77	3.6	86	3.8	115	4.7	158	5.7
Radiology	76	4.8	113	5.2	112	5.0	114	4.7	115	4.2
Urology	33	2.1	52	2.4	59	2.6	63	2.6	70	2.5
Other	296	18.6	277	12.8	311	13.9	359	14.7	424	15.3
Total	1593	100.0	2165	100.1	2245	100.0	2448	100.1	2770	100.0

Specialties exhibiting increasing numbers but decreasing relative proportions of the total physician population include: ophthalmology, urology, ob/gyn, pediatrics, radiology, and dermatology. The indication is that these specialties will be growing at a rate less than the overall physician pool. Only general surgery, orthopedic surgery and dermatology show decline in both numbers and share of the physician population during the 1980s.

Age-Group and Specialty, 1980-1990:

In addition to changes in numbers in the various specialties during the next decade, changes in the distribution of physicians by age groups within specialties are expected. Changing proportions of younger or older physicians are important considerations for manpower planning, and are not apparent until age-group distributions are examined. The proportion of physicians approaching retirement age, for example, is obscured when viewing only the aggregate numbers.

The distribution of the 1980 physician population by age group and specialty is shown in Table 2. A projected distribution for 1990 appears in Table 3.

When the trend experienced during the seventies is projected to 1990, the proportion of the state's physicians in the over-60 years age group shows a decline of 60 practitioners (from nearly 18 per cent of the state's 2245 doctors in 1980 to 12 per cent of the expected 2770 physicians a decade later).

Correspondingly, the proportion which is under 40 years of age is expected to increase from 37 per cent in 1980 to 43 per cent in 1990 (the number of physicians increasing from 822 to 1182). The 40-60 age group will increase from 1049 to 1254. (Their proportion of the total physician population, however, remains approximately 45 per cent.)

In 1980, no fewer than one fifth of those in ophthalmology, general and family practice, general surgery, and orthopedic surgery were over 60 (approximately 32, 27, 24, and 22 per cent, respectively). On the other hand, only about 10 per cent of the practitioners in neurology, psychiatry, pediatrics, and otolaryngology were over 60; between 45 and 60 per cent of these groups of specialists were physicians under 40.

Because the cohort will age during the next 10 years, the 40 to 60 group may signal problems for manpower planners looking toward and beyond 1990. Neurosurgery and pathology (with two thirds of their numbers in that age group), and urology (59 per cent) therefore should be monitored closely.

The projected distribution by age group and specialty reveals four specialties expected to be

TABLE 2

Actual (1980) Number and Age Distribution of Active Permanently-Licensed Medical Doctors in West Virginia, By Specialty

	AGE GROUP					
	Under 40 Years		*40-60 Years*		*Over 60 Years*	
Specialty	*Number*	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*
Anesthesiology	26	40.0	32	49.2	7	10.8
Dermatology	8	36.4	11	50.0	3	13.6
General/Family Practice	139	32.6	170	39.8	118	27.6
General Surgery	58	25.6	114	50.2	55	24.2
Internal Medicine	156	47.4	120	36.5	53	16.1
Neurosurgery	4	22.2	12	66.7	2	11.1
Neurology	14	58.3	9	37.5	1	4.2
Ob/Gyn	52	37.4	74	53.2	13	9.4
Ophthalmology	19	26.8	29	40.8	23	32.4
Orthopedic Surgery	20	25.9	40	52.0	17	22.1
Otolaryngology	21	45.6	20	43.5	5	10.9
Pathology	23	23.2	65	65.7	11	11.1
Pediatrics	61	45.9	59	44.3	13	9.8
Psychiatry	41	47.7	35	40.7	10	11.6
Radiology	40	35.7	62	55.4	10	8.9
Urology	21	35.6	35	59.3	3	5.1
Other	119	38.2	142	45.7	50	16.1
Total	822	36.6	1029	45.8	394	17.6

relatively young in 1990. Psychiatry will have more than two thirds of its members under 40. Nearly 60 per cent of the general and family practice group, half of the neurologists, and 49 per cent of the internists are expected to be in that age group. Internal medicine, otolaryngology, pediatrics, and radiology are expected to have more than 90 per cent of their members under 60.

Specialties exhibiting large proportions of physicians over 60 in 1990 are orthopedic surgery, urology, neurosurgery, and anesthesiology. Specialties expected to have fewer than 20 per cent of their members under 40 are urology, pathology, dermatology, and obstetrics/gynecology.

Specialty Groups, 1980-1990:

While detailed specialty information is more pertinent to specific programmatic questions, broader manpower policy questions can be more readily addressed by examining groups of specialties. For this purpose, four major specialty groups are defined: primary care; surgical care; hospital-based; and medical and other specialties.*

*Primary Care specialties includes: general and family practice, internal medicine, pediatrics and obstetrics/gynecology.

Surgical Care specialties includes: general surgery, ophthalmology, otology, otolaryngology, rhinology, cardiovascular and thoracic surgeries; hand, head and neck surgeries; neurosurgery, orthopedic surgery, pediatric surgery, plastic and traumatic surgeries, and urology.

TABLE 3

Projected (1990) Number and Age Distribution of Active Permanently-Licensed Medical Doctors in West Virginia, By Specialty

	AGE GROUP					
	Under 40 Years Projected		*40-60 Years Projected*		*Over 60 Years Projected*	
Specialty	*Number*	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*
Anesthesiology	45	52.3	27	31.4	14	16.3
Dermatology	4	20.0	13	65.0	3	15.0
General/Family Practice	310	58.5	160	30.2	60	11.3
General Surgery	94	45.4	82	39.6	31	15.0
Internal Medicine	209	48.6	181	42.1	40	9.3
Neurosurgery	9	37.5	11	45.8	4	16.7
Neurology	18	50.0	18	50.0	0	——
Ob/Gyn	35	20.7	109	64.5	25	14.8
Ophthalmology	25	30.1	48	57.8	10	12.1
Orthopedic Surgery	18	30.5	28	47.5	13	22.0
Otolaryngology	26	38.2	37	54.4	5	7.4
Pathology	25	18.1	92	66.7	21	15.2
Pediatrics	65	42.5	77	50.3	11	7.2
Psychiatry	106	67.1	34	21.5	18	11.4
Radiology	53	46.1	56	48.7	6	5.2
Urology	9	12.9	46	65.7	15	21.4
Other	131	30.9	235	55.4	58	13.7
Total	1182	42.7	1254	45.3	334	12.0

TABLE 4

Actual (1972, 1976, 1980) and Projected (1985, 1990) Number and Distribution of Permanently-Licensed Medical Doctors in West Virginia, By Major Specialty Group

	1972 Actual		*1976 Actual*		*1980 Actual*		*1985 Projected*		*1990 Projected*	
Specialty Group	*Number*	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*
Primary Care	774	48.6	1007	46.5	1028	45.8	1115	45.5	1282	46.3
Surgical Care	338	21.2	546	25.2	543	24.2	546	22.3	564	20.4
Hospital-Based	142	8.9	263	12.2	276	12.3	310	12.7	339	12.2
Medical and Other Specialties	339	21.3	349	16.1	398	17.7	477	19.5	585	21.1
Total	1593	100.0	2165	100.0	2245	100.0	2448	100.0	2770	100.0

Hospital-based specialties includes: anesthesiology, radiology and pathology.

Medical and Other specialties includes: dermatology, psychiatry and "other" specialties.

Distribution of the actual and projected physician populations by these specialty groups is shown in Table 4. Physician populations recorded in 1980 and projected for 1990 are categorized by both specialty and age groups in Tables 5 and 6, respectively.

Between 1980 and 1990, a net increase of 525 physicians is expected (from 2245 to 2770). Forty-eight per cent of the increase is in the primary care group. The corresponding portions of the increase falling in medical and other specialties, hospital-based specialties, and surgical care specialties are 36, 12, and four per cent.

The greatest degree of within-group growth is exhibited by the medical specialty group with 47 per cent. The rates of growth within each of the remaining specialty groups are 23 per cent in hospital-based, 25 per cent in primary care, and four per cent in surgical care.

Change in the age distribution of the specialty groups also is expected to occur. For 1980, the medical and other specialties group shows the highest proportion of persons under 40. Primary care also shows a large proportion under 40; however, nearly 20 per cent of these doctors are over 60. Of the four groups, surgical care, proportionately, shows the fewest younger and the most older physicians. (Less than 30 per cent is under 40, and more than 20 per cent is over 60.)

By 1990, the age distribution of the total physician population will exhibit a shift toward more younger doctors and fewer older ones. The most dramatic change will occur in primary care, with the proportion of physicians under 40 increasing from 40 per cent to nearly 50 per cent while the proportion over 60 decreases from 19 to less than 11 per cent. The surgical care group continues to show only a third of its physicians under 40 and 16 per cent over 60.

Discussion

Interestingly, the manpower projections resulting from this study lie near the middle of a range of projections produced by Begun and Broom for the Southern Regional Education Board (SREB).[1,2]

TABLE 5

Current (1980) Age Distribution of Active Permanently-Licensed Medical Doctors in West Virginia, By Major Specialty Group

	AGE GROUP					
	Under 40 Years		*40-60 Years*		*Over 60 Years*	
Specialty Group	*Number*	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*
Primary Care	408	39.7	423	41.1	197	19.2
Surgical Care	155	28.5	278	51.2	110	20.3
Hospital-Based	89	32.3	159	57.6	28	10.1
Medical and Other Specialties	170	42.7	169	42.5	59	14.8
Total	822	36.6	1029	45.8	394	17.6

TABLE 6

Projected (1990) Number and Age Distribution of Active Permanently-Licensed Medical Doctors in West Virginia, By Major Specialty Group

	AGE GROUP					
	Under 40 Years Projected		*40-60 Years Projected*		*Over 60 Years Projected*	
Specialty Group	*Number*	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*
Primary Care	619	48.3	527	41.1	136	10.6
Surgical Care	188	33.3	285	50.5	91	16.1
Hospital-Based	123	36.3	175	51.6	41	12.1
Medical and Other Specialties	252	43.1	267	45.6	66	11.3
Total	1182	42.7	1254	45.3	334	12.0

To project physician resources for 14 southern states, Begun and Broom applied the proportion of total United States medical graduates for the 1960-1964 and 1965-1969 periods who settled in particular states to current and estimated numbers of state graduates, and added the results to the December, 1978, stock of practicing physicians. Adjustments to account for incoming osteopathic physicians and net gains of foreign physicians were made; and retirement and mortality rates, adjusted for age and sex, were then applied. Their results for West Virginia ranged from 2767 to 3051 medical doctors and osteopaths in 1990.

When comparing the SREB and OHSR projections, two factors must be considered. The SREB study takes its 1978 base physician population for West Virginia from American Medical Association master files: the base number appears to be too high by approximately 125 M.D.s. Moreover, the OHSR study does not include osteopaths. Subtraction of the 90 D.O.s expected to be practicing in West Virginia in 1990, and the 125 M.D.s indicated above from the SREB projections, yields an estimated range of 2550 to 2840 M.D.s for West Virginia in 1990.

A second, supply-based projection by Begun and Broom allocated an estimated national supply of physicians to each state. The allocation was based on current and projected physician distributions among states. The projected physician distribution was then adjusted for population changes expected in the United States by 1990. Adjusting their results for the 1978 medical doctor base and osteopathic physicians yields a projection of about 3000 medical doctors in West Virginia by 1990.

The OHSR projection (2770) falls near the midpoint (2775) of the range of values from the SREB studies (2550-3000). The consistency of these results is reassuring; however, these sets of projections represent only a beginning in assessing West Virginia manpower.

Numbers to Increase

This first step shows that between 1972 and 1980 the number of active medical doctors in West Virginia increased by 41 per cent and is expected to increase by 23 per cent between 1980 and 1990. Moreover, the specialty distribution of these doctors has changed substantially since 1972. General/family practice declined during the 1970s, but is expected to turn around during the 1980s. On the other hand, general surgery's decline in proportion of total doctors is expected to continue.

Between 1980 and 1990, if current trends continue, all specialties except orthopedic surgery, general surgery, and dermatology will grow in number. While surgical specialties show the smallest net change during the eighties, primary care specialties account for nearly half the net increase in total physician population. The substantial investment in primary care during the seventies appears to have major impact. Similarly, the lack of attention paid to surgical care also will be evident: growth in all surgical care specialties is expected to be only three per cent.

The problem of large proportions of older general practitioners in the seventies may be resolved during the eighties. By 1990, the state is expected to have more and relatively younger general/family practitioners. Continuation of the trends of the last several years may produce the irony of the state facing problems in the surgical care specialties in the late 1980s and 1990s similar to those experienced in primary care during the 1970s. While the Graduate Medical Education National Advisory Committee[3] is predicting large surpluses in general surgery and orthopedic surgery, West Virginia may experience declines in the actual numbers and relative increases in the proportion of older physicians for these specialties.

Imperative for State

It appears imperative for this state, with increased responsibilities for medical and graduate medical education, to track continuously the residency situation and to monitor the physician population. It is possible, thereby, to foresee many of the problems in our future manpower complement and to make appropriate adjustments in our recruitment and training efforts. While this work represents an attempt to outline recent trends and present some idea of future supply in a number of medical specialties, an assessment of the adequacy of our current and projected physician supply now needs to be undertaken.

Although a variety of studies have established standards which can be applied to assess the adequacy of such specialties in West Virginia,[4] the recent work of the Graduate Medical Education National Advisory Committee[5] appears to be the most reasonable starting point. Recognizing the problems associated with applying these national standards to the West Virginia health system, they probably represent the single best yardstick by which the State's physician supplies can be measured. The application of the

GMENAC findings should be undertaken and carefully examined as a next step in formulating an effective manpower policy in West Virginia.

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Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be typewritten, triple-spaced, on one side only of firm (no onion skin or flimsy), standard letter sized (8 ½ by 11 in.) white paper. Wide margins (at least 1 ¼ in. on left) should be left free of typing. On the first or title page should be shown the title of the article, the name (or names) of the author, and his degrees. Pages should be numbered consecutively, the page number being shown in the right upper corner along with the surname of the author.

Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

A short abstract summarizing the manuscript should be included. This should be typed in double space on a separate page.

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Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for reproduction should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. Cost of printing black and white photos in excess of 4 will be billed to author, and no more than 25 references will be published free of charge to the author. A legend should be provided for each illustration and, preferably, attached to it.

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Hydraulic Stretcher Reduction Technique For Anterior Dislocation Of The Shoulder

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THE usual method of reducing an acute anterior dislocation of the shoulder is by using a modification of the Milch maneuver. Reduction is obtained by attaching the prone patient's overhanging arm to a gradually increasing traction of weights or a water pail. This is successful in over 90 per cent of the cases. In the unusual case where reduction cannot be achieved, traction and countertraction with the operator's foot to the patient's axilla (Hippocratic maneuver) under general anesthesia has to be performed.*

It seems to be a formidable task sometimes to acquire the weights or pail for the usual method of traction. Many emergency departments now have hydraulic stretchers. With the sedated patient in the prone position with his arm dangling over the stretcher, it is a very simple maneuver to tape his hand to the bottom of the frame or wheel and, using the hydraulic pedal, gently elevate the stretcher. Traction is gradually increased with each pump until reduction is achieved.

* Schwartz SI: *Principles of Surgery,* New York, McGraw-Hill Book Co, 1979, p 1939.

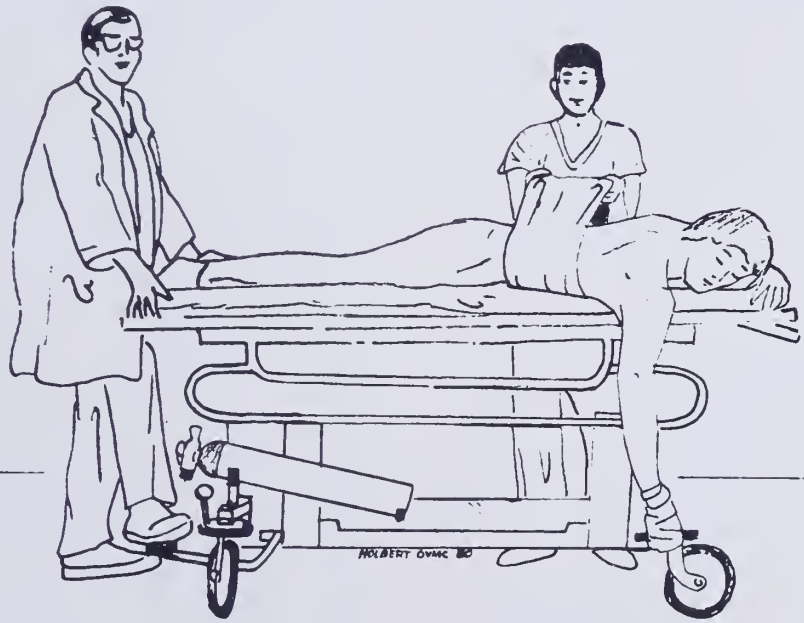

Figure. Hydraulic stretcher reduction.

Medical Grand Rounds

From the West Virginia University Medical Center

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Regulation Of Mammalian Sexual Differentiation

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Recent progress in the understanding of the mechanisms which direct normal mammalian sexual differentiation is reviewed. In addition, examples of aberrant genotypic and phenotypic sexual development will be presented since it has been through investigation of these individuals that much of the recent progress has been made.

In general, genetic sex determines gonadal sex through expression of the sex chromosomes. Gonadal sex then directs subsequent phenotypic sex via the elaboration of specific hormones. These processes depend upon the expression of various signals at certain critical periods during embryogenesis for normal sexual differentiation to occur.

SEXUAL differentiation of the mammalian embryo is an ordered and sequential process in which bipotential structures are directed to develop into either male or female reproductive systems. The divergence of common structural anlage into distinct male or female reproductive organs is regulated by genetic and hormonal factors which are expressed at certain critical periods during embryogenesis.[1,2]

In general, genetic sex determines gonadal sex which, in turn, influences phenotypic sexual differentiation. Aberrations in any of these steps can result in profound consequences within the developing embryo which are then expressed as abnormal or ambivalent sex phenotypes.

The primary or genetic sex of an individual is established at the time of fertilization and is determined by whether an X or Y chromosome-bearing spermatozoa successfully fertilizes the X chromosome-bearing ovum.[3,4,5] Once genetic sex is established, the indifferent gonad is directed to differentiate into either an ovary or a testis. The association of the Y chromosome and the XY karyotype with testicular differentiation and the XX karyotype with ovarian development had been known for several decades (Figure 1). However, the cellular mechanism which enabled the sex chromosomes to induce gonadal organization was not appreciated.

HY Antigen: Insight into the cellular mechanism mediating the transfer of genetic sex into gonadal sex occurred rather indirectly from studies concerned with skin graft rejection phenomena in mice. In 1955, Eichwald and Silmser[6] observed that in the highly inbred C57B1/6 mouse, male-to-female (XY-to-XX) skin grafts were uniformly rejected. In contrast, skin grafts between these mice in any other genetic combination (male-to-male, female-to-female, female-to-male) were uniformly accepted. Since the only difference between the male-to-female grafts and the other genetic combinations was the transfer of Y chromosome-bearing tissue to a non-Y-bearing female host, these investigators speculated that graft rejection by the female host was due to recognition of some male-specific tissue surface antigen expressed by the Y chromo-

Genetic Sex →	*Gonadal Sex* →	*Phenotypic Sex*
XY →	Testis →	Virilization
XX →	Ovary →	Feminization

Figure 1. Sequence of steps in the sexual differentiation of the mammalian embryo.

some. This hypothetical male-specific tissue surface antigen was designated the HY (histocompatibility-Y) antigen, and the gene responsible for its expression was named the HY gene.

Serologic Detection

Subsequent investigations designed to confirm the existence of such a male-specific antigen resulted in its serologic detection on the surface of most male tissues utilizing an antibody generated in sensitized female graft hosts. Various other techniques also have been developed (sperm cytotoxicity assay, hemagglutination) which confirm the existence of the HY antigen.[7,8,9]

The HY antigen now has been partially characterized and shown to be a surface antigen with a molecular weight of 18,000. It has been serologically detected on the membranes of most tissues obtained from a variety of male vertebrates. Furthermore, HY antigen is not detectable on female tissue surfaces.

Although the HY antigen is expressed ubiquitously on all male tissues, specific high-affinity membrane receptor binding sites have been detected only in gonadal tissues (indifferent male or female gonads and differentiated testis). The widespread phylogenetic occurrence of such a male-specific surface marker in vertebrate animals coupled with the determination of HY-specific receptors on gonadal surfaces suggested a more vital function of the HY antigen than graft recognition. In 1975, Wachtel and Ohno[4] proposed that the HY antigen might be the testicular organizing factor elaborated by Y chromosomes during embryogenesis.

Regulation of Gonadal Differentiation: Watchel and Ohno proposed that the HY antigen was expressed by certain genes directing organogenesis which reside on the Y chromosome. Since HY antigen is detectable in the male embryo at the eight-cell stage,[10] they envisioned that the HY antigen was disseminated throughout the embryo and interacted with specific HY antigen receptor sites on the indifferent gonad which resulted in induction of testicular development (Figure 2). Whether a separate factor exists which directs ovarian development or if the absence of HY antigen signals the indifferent gonad to become an ovary is unknown. At present, no specific ovarian-inducing factor has been isolated in female embryos;[8] however, indirect evidence for such a factor has been obtained from observations in individuals who possess aberrant sex genotypes and consequent gonadal dysgenesis.

Aberrant Genotypic Sexual Development

Four examples of aberrant genotypic sexual development follow:

Turner's Syndrome: Deletion of one X chromosome from the normal female karyotype (45X0) results in ovarian dysgenesis. These individuals exhibit streak ovaries, short stature,

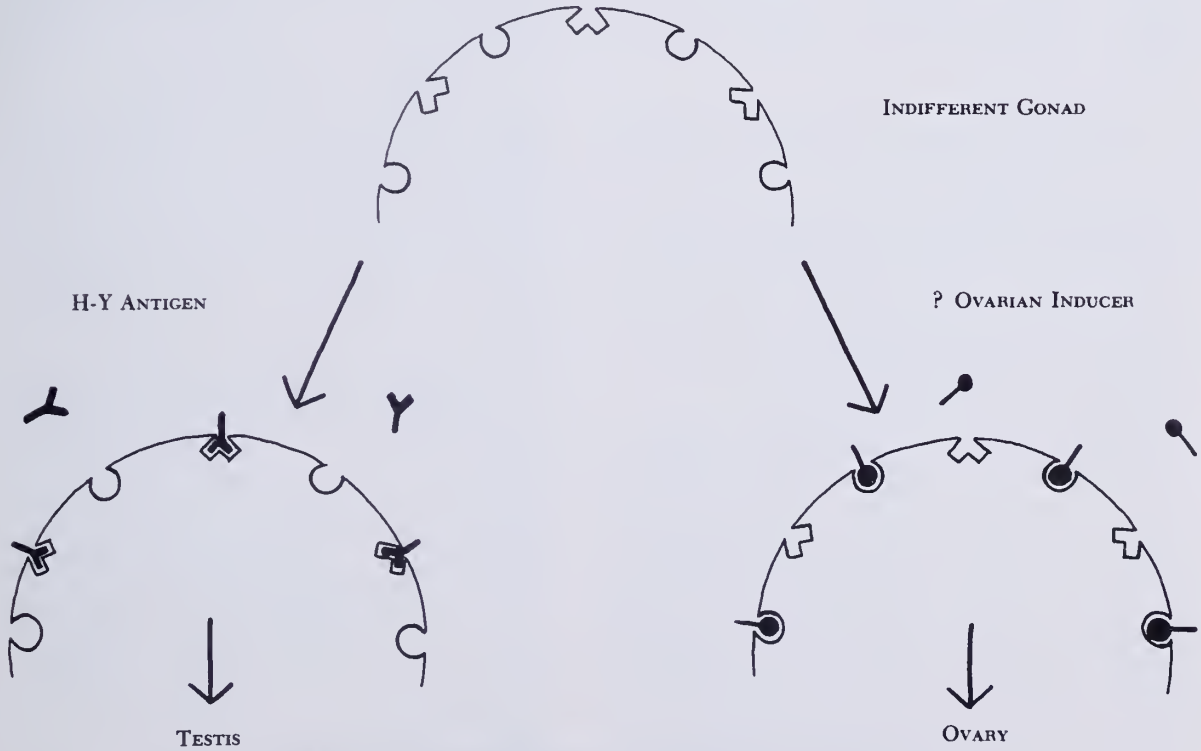

Figure 2. Proposed mechanism of gonadal differentiation.

webbed necks, female phenotypes, low plasma estrogens and elevated gonadotrophin levels. The failure of normal ovarian function associated with the deletion of one X chromosome suggests that expression of both X chromosomes is required for normal ovarian development.[11]

Klinefelter's Syndrome: The addition of extra X chromosomal material to the normal male karyotype (47XXY) also results in gonadal dysgenesis. These individuals have small testes with abnormal seminiferous tubules and absent spermatogenesis. They are tall, exhibit diminished facial hair, small penises, gynecomastia, low plasma androgens and elevated gonadotrophins. These observations suggest that there may be competition between X- and Y-directed factors on the surface of the indifferent gonad, and imply that the additional X chromosome results in insufficient HY-directed information being conveyed to the indifferent gonad.[11]

Mixed Gonadal Dysgenesis: Genotypic mosaics with variable sex karyotypes (48XX/YY, 48XX/XY, 47XYY) have been described which exhibit variable gonadal differentiation.[11,12] The gonads in these individuals may exist as a separate, contralateral ovary and testis. However, ova/testes which are composed of both testicular and ovarian tissue within the same structure may occur. The ova/testes can exist bilaterally or unilaterally in combination with a normal contralateral gonad which is usually a testis. Although, phenotypically, these individuals may present as either males or females, most have masculine features.[10]

Investigation of material obtained by biopsy from these individuals has demonstrated HY antigen on the surface of all tissues, but in lower concentrations than found in normal males. The HY antigen and specific HY receptors have been found only on the testicular portion of the gonad. These observations lend further support for the hypothesis that the HY antigen is required for nomal testicular development, and imply a dose-dependent inductive process.[4]

Conflicting Sex Phenotypes and Genotypes: The final example of aberrant gonadal differentiation which supports the HY antigen hypothesis has come from observations in individuals who exhibit conflicting sex genotypes and phenotypes. XX and XO males and XY females occur with a frequency of 1/10,000 live births.[10] They are not completely normal phenotypically and are invariably infertile. Analysis of these individuals for HY antigen, however, has shown its presence on the surfaces of biopsy material taken from XX and XO males, whereas the HY antigen is not present in the XY females.[11] Utilizing fluorescent-labelled anti-HY antibody, several investigators have demonstrated the HY gene on the pericentric portion of the Y chromosome. In HY positive XX males, autosomal translocation of this portion of the Y chromosome has been observed.[11,12] Thus, expression of the HY antigen results in testicular development regardless of the presence or absence of the Y chromosome.[10]

The various examples cited above are only indirect evidence for the existence of a Y chromosome-directed testicular organogenesis factor. Recently, Ohno has provided further evidence to support his hypothesis utilizing tissue culture experiments with indifferent XX and XY gonadal tissue. He has demonstrated induction of testicular development of XX indifferent gonads following exogenous application of HY antigen obtained from a male tumor cell line.[13] Moreover, XY indifferent gonads which were lysostripped of HY antigen with anti-HY antibody resulted in ovarian development.[13]

Thus, evidence is accumulating which implies that genotypic sex is expressed in the indifferent gonad by the elaboration of specific X or Y chromosome-directed proteins which may compete in a dose-dependent manner for specific anchorage sites. There is substantial evidence supporting the existence of the HY antigen and certain indirect evidence for a separate ovarian organizing factor. Further studies are required to determine the nature of the interaction of these different factors in the regulation of gonadal differentiation.

Phenotypic Differentiation

The development of male or female phenotypic sex occurs subsequent to the initiation of gonadal differentiation.[1,2] Although phenotypic sexual differentiation is influenced by the gonad, it is not dependent upon it since both male and female embryos will develop into normal phenotypic females if the testis is absent for any reason.[1,2]

Estrogens do not appear to be required for female phenotypic differentiation; however, ad-

Male Phenotype				*Female Phenotype*
Seminal vesicle Vas deferens	← T	Wolffian duct	→	Regression
Regression	← MIF	Müllerian duct	→	Ovaducts Proximal uterus
Prostate	← DHT	Urogenital Sinus	→	Uterus Proximal vagina
Penis Scrotum	← DHT	External Genitalia	→	Labia major Labia minor Clitoris

(T = testosterone, DHT = dihydrotestosterone, MIF = Müllerian Inhibitory Factor)

Figure 3. Phenotypic differentiation of the mammalian urogenital structures.

ministration of androgens results in male phenotypic differentiation in gonadectomized male or female embryos.[2] These observations indicate that phenotypic differentiation of the indifferent accessory sex organs is determined primarily by the presence or absence of a functioning secretory testis; in its absence both male and female embryos will become phenotypic females.[13,14]

Male Phenotypic Differentiation: Prior to the initiation of testicular steroidogenesis, the internal and external accessory sex organs from both sexes are indistinguishable (Figure 3). However, subsequent to the secretion of testosterone from the testis, male phenotypic differentiation occurs. Testosterone itself stimulates the induction of Wolffian duct differentiation into the seminal vesicle and vas deferens.[13,14]

Virilization of all other internal and external sex accessory tissues of the male, however, requires the intracellular conversion of testosterone into dihydrotestosterone by an enzyme called 5-alphareductase.[15,16] Formation of dihydrotestosterone is required for differentiation of the urogenital sinus into the prostate and virilization of the external genitalia. In addition to the secretion of testosterone, the testis also elaborates a peptide called Müllerian Inhibitory Factor (MIF), which induces regression of the Müllerian duct system in the male.[17]

Female Phenotypic Differentiation: In the absence of a functional secretory testis, female phenotypic differentiation occurs (Figure 3). Estrogens do not appear to be required for this process and, in the absence of androgens and MIF, the Müllerian duct system differentiates into the fallopian tubes, uterus, and the proximal portion of the vagina. In addition, the urogenital sinus forms the remainder of the vagina, the Wolffian ducts degenerate, and the external genitalia evolve into their characteristic phenotypic structures.[1,2]

Cellular Mechanism of Virilization: The precise intracellular regulatory processes which mediate the development of the indifferent embryo into a female are poorly understood. However, this process appears to be predetermined, given the observations that both male and female embryos become phenotypic females in the absence of the virilizing effects of androgens.[1,2] In contrast, the imposition of the male phenotype upon the indifferent gonad is an active process mediated by androgens which induce specific structural and regulatory genes at critical periods during embryogenesis.

Androgens are now believed to induce their biological effects within responsive tissues of the embryo by interacting with steroid-specific intracellular receptor binding proteins within the cell cytoplasm as opposed to the surface receptors for the HY antigen.[14,15,18] These intracellular receptor proteins serve to translocate the hormone to the nucleus of the cell where the hormone-receptor complex interacts with nuclear chromatin. This results in the induction of specific structural and regulatory genes which mediate phenotypic differentiation as well as maintain the secretory function of these tissues following puberty (Figure 4).

As mentioned earlier, prior reduction of testosterone to dihydrotestosterone is required for successful induction of phenotypic differentiation

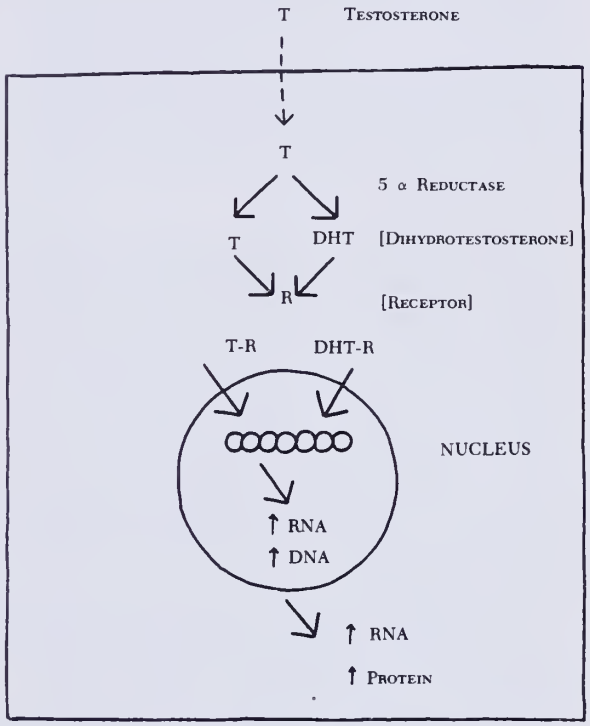

Figure 4. Proposed mechanism of action of androgens in target tissues.

TABLE

Phenotypic Comparison of Inheritable Androgen Resistance Syndromes

	5 Alpha-Reductase Deficiency	*Testicular Feminization*	*Reifenstein Syndrome*
Phenotypes			
testes	(+)	(+)	(+)
seminal vesicles	(+)	(−)	(−)
vas deferens	(+)	(−)	(−)
prostate	(−)	(−)	(−)
uterus	(+)	(−)	(±)
female genitalia	(+)	(+)	(±)
breasts	(±)	(+)	(±)
serum androgens	normal	elevated	elevated
serum gonadotrophins	normal	elevated	elevated

of all anlagae except the Wolffian duct, which differentiates into the seminal vesicle and vas deferens under the influence of testosterone directly. Consequently, aberrations in any of the intracellular steps mediating the actions of androgens within these tissues will result in abnormal male phenotypic differentiation.

Syndromes of Androgen Resistance

Four syndromes of androgen resistance follow:

5-Alphareductase Deficiency: This is an autosomal recessive disorder in which there is deficient or absent 5-alphareductase present within the sex accessory anlagae responsible for the formation of dihydrotestosterone. As a consequence, the external genitalia of these 46 XY individuals are female although they possess normal abdominal or perineal testes (Table). The internal genitalia also are aberrant in that the urogenital sinus differentiates into a vagina or pseudovagina instead of a prostate in the absence of dihydrotestosterone.

The Müllerian duct system regresses normally under the influence of MIF; however, the Wolffian duct system does differentiate into a normal seminal vesicle and vas deferens since this process is induced by testosterone instead of dihydrotestosterone and is therefore not dependent upon the presence of 5-alphareductase. These individuals also have feminized external genitalia, and normal plasma androgen and gonadotrophin levels as well as androgen receptors. If they are not orchiectomized prior to puberty, they will develop clitoral hypertrophy and a male gender identity.[12,20,21]

Testicular Feminization: This is an X-linked disorder in which quantitative or qualitative abnormalities of the intracellular androgen receptor exist. This abnormality results in complete feminization of 46 XY individuals with regard to external genitalia and breast development in spite of the presence of normal secretory abdominal or inguinal testes.[21,22] Similar to those individuals with 5-alphareductase deficiency, the oviducts and uterus are absent in Testicular Feminization because of the actions of MIF on the Müllerian duct system. However, the urogenital sinus, Wolffian duct and external genitalia are not virilized because of the deficient androgen receptor and, as a consequence, the seminal vesicles, vas deferens and prostate are absent in these individuals. Plasma androgens and gonadotrophins are elevated, which reflects the dependency upon androgen receptors at the pituitary level for adequate feedback regulation.

Reifenstein Syndrome: This disorder also is an X-linked process which results in defective androgen receptor content within sex accessory tissues.[19,20,21] There is variable expression of this abnormality of the androgen receptor, and affected individuals most commonly present as phenotypic males with gynecomastia, hypospadius and infertility. More prominent expressions of this receptor defect, however, are individuals with rudimentary vaginas and bifid scrotums.

Post-Receptor Defects: The final subset of androgen-resistant, feminized males are individuals who present phenotypically as Testicular Feminization, but in whom androgen receptor content and 5-alphareductase levels within sex accessory tissues are normal. Intensive investigation of androgen assimilation in these individuals has suggested a defect in the intra-nuclear processing of the androgen receptor complex which results in inadequate expression of normal virilization.[21]

Summary

This discussion has reviewed the various stages of normal sexual differentiation. This is a very ordered and sequential process in which genetic sex is translated into gonadal sex which in turn directs phenotypic sex via the elaboration of specific hormones. The proposed mechanisms concerned wtih the regulation of this process as well as abnormalities which result in conflicting sex phenotypes or genotypes have been presented.

There is increasing evidence to support the concept that dissemination of the HY antigen as expressed by the Y chromosome is responsible for organization of the indifferent gonad into a secretory testis. Whether a separate factor exists which directs ovarian development is unknown at the present time. However, ovarian organogenesis may be an intrinsic process of the embryo just as female differentiation is. In contrast, male phenotypic differentiation is an active inductive process which depends upon the elaboration of testosterone and MIF from the testis as well as adequate end-organ sensitivity to these hormones.

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Mix of Energy Sources Needed

UTILITIES and energy-related government agencies should continue to improve nuclear reactor safety and efficiency while exploring methods of generating electricity, states a panel of medical radiation experts assembled by the American Medical Association's Council on Scientific Affairs.

The recommendation is one of several made in the panel's 40-page report, *Risks of Nuclear Energy & Low-Level Ionizing Radiation,* published recently by the AMA. The AMA has been studying the health effects of nuclear energy and other energy sources since 1972.

The report was written in response to a resolution adopted by the AMA House of Delegates in July, 1979, directing the AMA "to monitor studies of the inherent safety of nuclear power versus other energy sources . . . and the safe disposal of low-level radioactive wastes" and "to study the potential risks of exposure to low-level radiation." The report was approved by the House of Delegates in June, 1981.

A message from . . .

The President

IF IT'S RIGHT, WORK FOR IT!

January for most of the country means winter and cold weather, and so it is for us here in West Virginia. January is the month when most West Virginians turn up their heating systems, and bundle up when they're outside.

In Charleston, to some extent, we are spared. We have a "hot air system" emanating from the Capitol Complex, the Legislature being in session then.

This year will be no different. The Legislature will convene in January for its annual session to wrestle with the problems facing the people of West Virginia.

In the field of health care, there again will be a number of bills introduced. Some of these bills will result from ideas and proposals garnered from the public hearings held by Senators, such as the hearing that Mr. Lewis, Mr. Bible and I attended. At this hearing one speaker complained of a fee his urologist charged him in 1981 compared to 18 years ago, an increase of about 300 per cent. After the hearing, he left the building and got into his late-model El Dorado Cadillac and drove home. Other sources for bills can include the Governor's Health Cost Containment Task Force, and for all these we must be prepared.

Our Legislative Committee held a meeting in November and went over all potential bills that may be introduced. The Association position on each of these bills was developed and put into a report which was sent to the Secretaries of the component medical societies.

We here in Charleston will continue to monitor the actions of the Legislature, being prepared to respond to any matters with which we as physicians, as citizens, and as taxpayers are concerned. Whatever we may be able to accomplish here, I am sure it will not be enough without help.

It is of utmost importance that physicians all over the State make every effort to meet and discuss with their legislators our positions on health care legislation.

It is especially important to convince our legislators that we *embody* access to health care, and that, as partners, we can and will continue to provide the highest quality of care possible, ever mindful of the cost, use and abuse of our health facilities. We will not, however, become the whipping boy of politicians for promises they made only to find they were too expensive to keep, nor will we become indentured servants to satisfy those promises made.

Dr. Joseph F. Boyle, Chairman of the Board of Trustees of the American Medical Association, in a speech at a meeting of the Medical Society of Virginia, said that the AMA is changing its image, and that the policy will be to weigh an issue not on the basis of the politics of that issue, but whether it is right or wrong. If it is right, work for it, support it. If it is wrong, oppose it.

I feel our legislative program is so based, and commands the support of all members of our State Association. We must seize the opportunity of this moment! We must become involved for ourselves, but more importantly, for those we serve.

John B. Markey

John B. Markey, M. D., *President*
West Virginia State Medical Association

The West Virginia Medical Journal

Editorials

The Publication Committee is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author shall be held entirely responsible. Editorials printed in The Journal do not necessarily reflect the official position of the West Virginia State Medical Association.

MEDICAL MANPOWER

Even to the casual observer, it has been inescapable that over the past 20 years an increasing number of physicians has been earning a living in West Virginia. The Special Article starting on page 1 documents the accuracy of this observation.

We urge you to read it. Don't be turned off by the description of methodology which initially seems confusingly technical. It's not really very difficult, and the conclusions are fascinating for anyone planning to be around come 1990.

We doubt that anyone currently established in a practice is going to feel threatened in any way as a result of anything in this article. Some figures might give pause to would-be workaholics or to certain young specialists dreaming of an early retirement to that sailboat and condominium at the shore or the chalet at Aspen. They might be well advised to marry a rich wife. Medical students and those planning a residency would do well to examine the implications for their future contained in this study.

This is a good study because it is thought provoking. It gives rise to more questions than it purports to answer. Will the problem of inadequate medical manpower in rural areas be solved? Or even touched? What does this portend for the future of the Family Practice movement? Will the developing power struggle between hospital boards and medical staffs cease or become worse as a result of the projected manpower trends? Will the added physician numbers create competition and cut into medical costs? Or will the burgeoning demand for more and more medical care with its implicit expectation of immortality simply swallow up these increased numbers?

And one very immediate question. In the face of these projections, will the West Virginia Legislature continue to fund in the same generous manner the three schools providing medical education in West Virginia? We currently rank second among the 50 states in the amount provided on a per-capita basis for medical education.

Worries, worries, worries. The future is gaining on us rapidly. To whatever extent the future can be made predictable, our anxiety can be made correspondingly more controllable.

We will continue our effort at divining West Virginia's medical manpower future in February with an article titled, *West Virginia Medical Doctor Supply During the 1980s: An Assessment Using GMENAC Requirements Standards.*

Don't miss it.

DRIVING AND ALCOHOL

The wheels of legislation and justice seem to grind exceeding slow when large and influential segments of the economic community are threatened. The manufacturing of alcohol appears to be such a segment. Hundreds of thousands of people have been killed and uncounted millions injured in automobile accidents directly attributable to the use of alcohol by the drivers. Yet, in spite of constant renewal of attempts to secure passage of truly workable legislation increasing penalties for driving under the influence, such efforts unaccountably come to naught.

Either proposed legislation fails entirely, or it runs afoul of enforcement, paper and administrative problems. Economic and other pressures constantly are being exerted, on behalf of those who benefit from increased alcohol sales, to bring about the liberalization of any and all restrictions on the distribution and use of alcohol. What is the magic wielded by those interests which can make the imposition of effective controls and penalties by a legislature so impossible?

Adequate penalties DO deter drunks from driving. There is almost no drunken driving in Norway. No consideration is given the drunk, and the penalty is swift and sure. The first offense involves a prison sentence, a fine and suspension of license, without exception. The second offense results in an even longer sentence,

a greater fine and PERMANENT license revocation. Period. In Norway there always is one driver per car who abstains from drinking. Norwegians just don't drive after taking a drink.

Public education has not affected the horrible statistics discernably. Urging one to "not let a friend drive drunk" sounds fine—for the other guy. It has been estimated that 80 per cent of drivers on an average week-end night are in various stages of ethylation. Whatever the per cent, none has any great worry about penalties for driving while drinking. Perhaps it is the many successful negotiations of the route to and from the party that give the driver a false feeling of ability to function normally—then the unexpected and frequently fatal complication appears, and the needed reaction comes too late.

What is the magic that intimidates legislative and law enforcement agencies? We need to find the answer to that question and try to take steps to neutralize it. The medical profession should be in the thick of the fight. The act that was passed at the last legislative session hopefully can strengthen West Virginia's statutes dealing with the drinking driver; but even its most optimistic supporters fear it will have little effect, over the long haul, on the almost daily slaughter by the juiced-up car jockey.

To be truly effective, legislation to control drinking drivers will have to include at least: (1) a realistic minimum pathologic blood alcohol level; (2) truly punitive penalties; and (3) provisions for swift justice. The Legislature has made a little beginning. Let us, speaking for Organized Medicine, encourage it to expand its efforts.

MARIJUANA

The use of "pot" by our youngsters does not seem to have decreased noticeably, notwithstanding the increased attention being paid to the harmful effects of the drug by concerned medical people. In spite of doctors like Roger E. Myer, who stated at the October, 1980, American Academy of Family Physicians New Orleans meeting that he could find no convincing data confirming adverse effects of prolonged marijuana use, there has been no recent concerted effort on the part of the "media" to promote decriminalization of marijuana transportation, distribution and use. It could be that the message is finally getting through and that the media finally are looking at the mounting evidence of physical and mental pathology resulting from pot and hash use.

It is to be hoped that most doubting Thomases, especially those in the medical profession, are finally being convinced that the evil effects of marijuana on the brain, lungs, and reproductive organs indeed are real. And one may further hope that they will try to spread the bad news among their young patients at every opportunity.

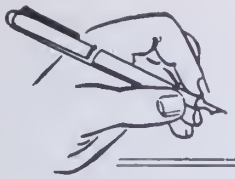
One researcher found that menstrual cycle lengths were an average of two days shorter in pot-smoking women aged 18 to 39, compared to a similar-age, non-smoking group of women, and that 40 per cent of the smokers' cycles were anovulatory, compared to 15 per cent in non-smokers. Levels of prolactin and testosterone were significantly higher in the smokers.

Other investigators demonstrated decreased sperm motility and increased numbers of abnormally-shaped sperm in a group of men of similar ages who smoked eight to 18 "joints" during a given period in a controlled study. The Director of the National Institute on Drug Abuse, Dr. William Pollin, testified before a Senate sub-committee that research shows impaired memory, learning and intellectual performance in regular marijuana users, and that the heart, lungs and immune systems also are adversely affected. He also reported on a survey of 20,000 high school seniors in 1976 which showed one in 20 smoked pot daily, and one in 20 consumed alcoholic beverages daily. By 1979, the use of marijuana increased to one in nine while drinking remained the same. There was no increase in marijuana use in the survey of last year.

Another witness, Dr. Gabriel G. Nahas, Professor of Anesthesiology at Columbia University College of Physicians and Surgeons, recommended that five groups in particular should be warned against the use of marijuana: people with lung or heart disease, adolescents, women of child-bearing age, epileptics, and emotionally- or mentally-unstable individuals.

It is encouraging to hear Charles Mathias of Maryland, Chairman of the Senate Sub-Committee on Criminal Justice, say he is re-evaluating measures drafted in 1979 that would have lowered the penalties for possession of small quantities of marijuana. According to the Senator, hearings will be held to receive all new evidence so that the Senate "rationally and effectively" can consider marijuana legislation.

Perhaps now we can anticipate that the clamor to lower criminal liability for distribution and transportation of marijuana finally will be quieted. It may be that the voices of reason and scientific research finally will be heard above those of the promoters of leniency for marijuana dealers.



Our Readers Speak

Antibiotics Costs Questioned

(Addressed to Robert H. Waldman, M. D., Professor and Chairman, Department of Medicine, West Virginia University School of Medicine, Morgantown)

I have read with considerable interest your Special Article, "Appropriate Use of Antibiotics: Why Should We Care?," which appeared in the September issue of The West Virginia Medical Journal (1981; 77:229-234). In Table 2 you state that the cost of a course of cefadroxil to the pharmacist is $36.95, compared to $11.65 for cephalexin. Since, except for a few cents in a few cases, the costs you reported are identical to those included in the Medical Letter (1979; 21:85-87), I assume that that review served as your source. However, the reader was not apprised of that source by either reference or footnote. If your data come from some other source, I would be interested in knowing its identity. For accuracy and "fair balance" in the *total context* of your overall thesis, I believe the following points are in order:

1. The figures used by the Medical Letter were not completely accurate even in 1979.
2. Those costs are now two years old and, again, I stress that that point was not made even obliquely to the reader.
3. The specific costs which you used from The Medical Letter were "average generic prices" (as stated in The Medical Letter) for all medications except cefadroxil, and the reader was not advised of this point. The Medical Letter listed both generic and brand-name prices, except for cefadroxil for which only the latter was used. In fact, no generic price exists for cefadroxil.
4. Cefadroxil is approved for use as a one-gram-per-day dose in the treatment of uncomplicated cystitis (package insert containing full prescribing information is enclosed), but from your table the reader may reasonably infer that cefadroxil is only one-half as efficacious as cepahlexin and thus must be be given in twice the dose. Since your table did not define the severity of urinary tract infection involved, one need not assume *a priori* that the infection was a complicated pyelonephritis. Even then, cephalexin in a dose of 250 mg q.i.d. might not necessarily offer fully adequate treatment.

More current costs for cefadroxil (Duricef) and cephalexin (Keflex) are listed in the following chart. These costs are taken from the American Druggist Blue Book (July, 1981-June, 1982). They are calculated from the average wholesale price and are based on a 10-day course of treatment, using bottles of 100s.

Product	*Dose Form*	*Dosage*	*Total Daily Dose*	*Cost*
Keflex	250 mg capsule	1 cap q.i.d.	1 gram	$16.25
	500 mg capsule	1 cap b.i.d.	1 gram	15.96
Duricef	500 mg capsule	2 caps b.i.d.	2 grams	31.95
	1 gram tablet*	1 tab b.i.d.	2 grams	30.35
	1 gram tablet	1 tab q.d.	1 gram	15.18

* Not available when The Medical Letter prepared its review.

Thus, I believe it is apparent from the above data that the greater than three-fold cost differential between cephalexin and cefadroxil indicated in your Table 2 is not correct. The similarity is more striking than any perceived differences, especially when one considers an identical dose form and an identical total daily dose.

In summary, I do not believe that Table 2 of your article provided currently-accurate data and fairly-balanced information or implications.

Gordon R. McKinney, Ph.D.
Director, Medical Communications
Mead Johnson Pharmaceutical Division
Evansville, IN 47721

Comparison 'Irrelevant'

(Editor's Note: Here is Doctor Waldman's reply to Doctor McKinney's letter above.)

Thank you for your letter of October 12. I should like to respond to several of your points, and to discuss your recommendations for use of Duricef, as proposed in your package insert.

I apologize for the error in Table 2 of my article and the lack of a citation. I am certainly willing to accept the approximate equal cost and efficacy of Keflex and Duricef. However, as I tried to make clear in the text, this comparision is irrelevant to my theses, which are (1) Why use any cephalosporin in the treatment of urinary tract infections (with some very rare exceptions)?, and (2) For those very rare instances when an oral cephalosporin is useful, how can one justify the cost of development and testing of a drug which has no, or insignificant, advantage (such as cost) over the prototype?

There are several oral antibiotics (sulfonamides, ampicillin, tetracyclines, for example) which are just (or more) as effective, just as safe (or safer), and are a whole lot cheaper. Using your figures, if Duricef were used, instead of one of the aforementioned cheaper alternatives, to treat the approximately 10 million UTIs/year in the United States, it conservatively would cost the public over $100,000,000, and with no resulting benefit, except to Mead Johnson.

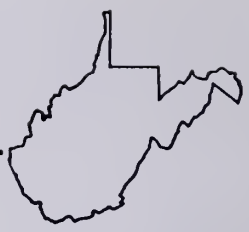
With respect to your package insert: you state that "Duricef is indicated" for "pharyngitis and tonsillitis caused by Group A beta hemolytic streptococci." Shame on you! There is *absolutely no indication* for the use of a cephalosporin in the treatment of streptococcal pharyngitis. Although you state that "penicillin is the usual drug of choice . . ." and that there is no evidence that cephalosporins prevent rheumatic fever, you and the Food and Drug Administration should be taken to task (even stronger, should be censored) for suggesting such an indication. Penicillin is *the* drug of choice, and erythromycin should be used in patients allergic to penicillin, and there is no reason to treat streptococcal pharyngitis other than to protect against rheumatic fever. You are lucky that the incidence of acute rheumatic fever has become so low in this country.

Once again, thank you for the letter, and I apologize for the error.

CHANGE OF ADDRESS

Members of the West Virginia State Medical Association are requested to notify the headquarters offices promptly concerning any change in address. The 1982 Roster of Members will be prepared and placed in the mails about the last of January and we would very much like for your corrected address to appear in same. If you have a P. O. Box, please give us that address. Notices should be mailed to Box 1031, Charleston West Virginia 25324-1031.

GENERAL NEWS



Diagnosis Of Heart Disease Conference Subject

"Current Diagnostic Procedures in Heart Disease" will be the title of the 2 P.M. opening session of the 15th Mid-Winter Clinical Conference scheduled January 22-24 in Charleston.

The annual continuing medical education event, which again will be held at the Holiday Inn Charleston House, is sponsored by the State Medical Association and the West Virginia University and Marshall University Schools of Medicine. The conference will continue through noon on Sunday, with other scientific sessions planned for Saturday morning, Saturday afternoon and Sunday morning.

Stafford G. Warren, M. D.

The speakers and topics for the opening Friday afternoon session on January 22, the Program Committee announced, will be "Percutaneous Transluminal Coronary Angioplasty"—Stafford G. Warren, M. D., Charleston, Clinical Professor of Medicine, Charleston Division, West Virginia University Medical Center; "Stress Testing After Myocardial Infarction"—Patrick L. Brown, M. D., Huntington, Clinical Instructor of Medicine, Marshall University School of Medicine;

"Treatment of PVCs and Electrophysiologic Testing"—Allen H. Schaeffer, M. D., Charleston, Clinical Assistant Professor of Medicine, WVU Charleston Division; and "Radionuclide Stress Testing"—Harry A. Bishop, M. D., Chief, Department of Radiology, United Hospital Center, Inc., Clarksburg, and WVU Clinical Associate Professor of Radiology.

Presiding will be Robert J. Marshall, M. D., Huntington, MU Clinical Professor of Medicine.

The conference schedule also will include a physicians' session and public session to be held concurrently Friday evening, a cash bar and hors d'oeuvres Saturday evening, and meetings of other medical groups as listed on the official printed program. Exhibits will be on display throughout the conference in the Copenhaver Room, which is immediately adjacent to the site of the main scientific sessions, the Hutchinson Room.

The program meets the criteria for 14 credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association, and also is acceptable for 14 Prescribed hours by the American Academy of Family Physicians.

"West Virginia Medical Institute Presents Selected Problem Identifications" will be the title of the Friday evening physicians' session, with Harry S. Weeks, Jr., M. D., of Wheeling, Medical Institute President, presiding. The program will be presented by members of the Institute's Data Committee: Mabel M. Stevenson, M. D., Huntington, Chairperson, Director, Tri-State Red Cross Blood Services and MU Clinical Professor of Pathology; Jimmy L. Mangus, M. D., Charleston, Medical Director, West Virginia Department of Welfare and WVU Clinical Associate Professor of Family Practice;

W. Gene Klingberg, M. D., Morgantown, WVU Professor and Chairman, Department of Pediatrics; and Thomas G. Potterfield, M. D., Director of Medical Affairs, Charleston Area Medical Center, and Clinical Professor of Pediatrics, WVU Charleston Division.

Patrick L. Brown, M. D.

Harry A. Bishop, M. D.

Donald S. Robinson, M. D., of Huntington will be the speaker for the concurrent public session. His topic will be "Food Additives—Can They Harm You?" Doctor Robinson is Chairman, Department of Pharmacology, and Professor of Pharmacology and Medicine, MU. Presiding will be Warren Point, M. D., Chairman, Department of Medicine, CAMC, and Associate Dean, WVU Charleston Division.

University of Rochester Graduate

Doctor Warren is certified in internal medicine and cardiology, and is a Fellow of the American College of Cardiology. A native of New York City, he has practiced in Charleston since 1974. Doctor Warren received his M. D. degree in 1969 from the University of Rochester, interned at the University Hospitals of Cleveland, and completed postgraduate studies there and at Duke University Medical Center.

Doctor Brown, who received his M. D. degree in 1972 from WVU, is certified by the American Board of Internal Medicine and the American Board of Cardiovascular Disease, and is a Fellow of the American College of Cardiology. A native of Madison, he interned at CAMC and completed a residency and fellowship at WVU in Morgantown.

A native of Charleston, Doctor Schaeffer returned there to practice in August, 1981, after holding teaching posts at Johns Hopkins Hospital in Baltimore. He was graduated from Johns Hopkins University, and received his M. D. degree in 1973 from the University's School of Medicine. He served his internship at Massachusetts General Hospital in Boston, and completed residencies and other postgraduate work in cardiovascular medicine, clinical pharmacology and adult cardiology there and at Johns Hopkins Hospital.

Doctor Bishop came to West Virginia in 1981 from Long Beach, California. In California, he was Chief, Department of Radiology, at the Pacific Hospital of Long Beach where he also was Director of Medical Education. He did resident teaching in nuclear medicine at the University of California at Los Angeles-Harbor General Hospital, and was Assistant Clinical Professor of Radiology at UCLA.

Certification

Doctor Bishop was certified by the American Board of Radiology in diagnosis, radiation therapy and nuclear medicine in 1961, and in clinical and laboratory in 1972. He is a Fellow of the American College of Radiology. He received his M. D. degree in 1954 from the University of California at San Francisco, interning at Tripler General Hospital in Honolulu, Hawaii, and completing his residency at UCLA.

The speakers and topics for the other scientific sessions, as announced previously, will be:

Saturday Morning: "Medical Risks of Food Additives"—Donald S. Robinson, M. D., who, as noted above, also will be the speaker for the Friday evening public session; and "Problems of the Elderly: An Analysis and Simulation"—Richard H. Kiley, Jr., Ph.D., Adult and Geriatric Program Director, Appalachian Mental Health Center, Elkins.

Saturday Afternoon ("Current Controversies in Medicine"): "Coal Workers Pneumoconiosis —Diagnostic and Therapeutic Considerations" —N. LeRoy Lapp, M. D., Professor of Medicine and Chief, Division of Pulmonary Diseases, WVU, Morgantown, and Donald L. Rasmussen, M. D., Director, Appalachian Pulmonary Laboratory, Inc., Beckley, and MU Clinical Assistant Professor of Medicine;

"Prostatic Carcinoma"—D. Franklin Milam, M. D., Professor of Surgery and Chairman, Department of Urology, WVU, Morgantown, and John B. Haslam, M. D., Charleston, Clinical Associate Professor of Radiology, WVU Charleston Division.

High-Risk Mothers

Sunday Morning: "Recognition and Management of High-Risk Mothers"—Juan L. Granados, M. D., Associate Professor of Obstetrics and Gynecology, WVU, Morgantown; "Recognition and Management of High-Risk Infants"—Herbert H. Pomerance, M. D., Chairman, Department of Pediatrics, CAMC, and Professor and Director of Pediatrics, WVU Charleston Division;

"Diagnosis and Treatment of Functional Disorders of the Thyroid"—Richard E. Kleinmann, M. D., Assistant Professor of Medicine, WVU Charleston Division ("Diagnosis"), and Stanley R. Shane, M. D., Professor of Medicine and Chief, Section of Metabolism and Endocrinology, WVU, Morgantown ("Treatment").

Presiding physicians in addition to those mentioned above will be Robert H. Waldman, M. D., Professor and Chairman, Department of Medicine, WVU, Morgantown (Saturday Morning); Maurice A. Mufson, M. D., Professor and Chairman, MU Department of Medicine, and Peter C. Raich, M. D., Professor and Chief, Section of Hematology-Oncology, Department of Medicine, WVU, Morgantown (Saturday Afternoon);

W. Gene Klingberg, M. D., who, as noted above, also will speak during the Friday evening physician's session, and Bruce S. Chertow, M. D., MU Professor of Medicine and Chief, Section of Endocrinology (Sunday Morning).

Exhibitors scheduled to date include:

Allergy Rehabilitation Foundation, Inc.; McDonough Caperton Shepherd Association Group, Inc.; West Virginia Lung Association, Inc.; West Virginia Department of Health; Read-More Publications, Inc.; Harper and Row Publishers, Inc.; General Bookbinding Company, and Health Professions Sales Group.

Registration

A registration fee of $50 will be charged all registrants except nurses, medical students, interns and residents. For advance registration, make checks payable to West Virginia State Medical Association, and mail to the Association at P. O. Box 1031, Charleston 25324.

Serving on the Program Committee are Drs. Ralph H. Nestmann and Joseph T. Skaggs, both of Charleston, Co-Chairmen; and Drs. William O. McMillan, Jr., Charleston; Maurice A. Mufson, Huntington; Robert L. Smith, Morgantown, and C. Carl Tully, South Charleston.

The Committee also is receiving continuing assistance from WVU Charleston Division staff members J. Zeb Wright, Ph.D., Coordinator of Continuing Education, Department of Community Medicine; and Sharon A. Hall, Conference Coordinator.

Review A Book

The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal*, Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication.

General Urology, 10th Edition, by Donald R. Smith, M. D. 598 pages. Price $19.50. Lange Medical Publications, Los Altos, California 94022. 1981.

Lifelong Sexual Vigor: How to Avoid and Overcome Impotence, by Marvin B. Brooks, M. D., and Sally West Brooks, R.N. 249 pages. Price $12.95. Doubleday & Company, Inc., 245 Park Avenue, New York, New York 10017. 1981.

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1982, as compiled by Dr. Robert L. Smith, Assistant Dean for Continuing Education, and J. Zeb. Wright, Ph. D., Coordinator, Continuing Education, Department of Community Medicine, Charleston Division. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of The Journal.)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Morgantown, Charleston and Wheeling campuses. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, 3110 MacCorkle Avenue, S. E., Charleston 25304; Office of Continuing Medical Education, WVU Medical Center, Morgantown 26506; or, Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

Jan. 27-30, Snowshoe, Third Mid-Winter Cardiovascular Symposium

March 26, Charleston, 9th Annual Newborn Day

Regularly Scheduled Continuing Education Outreach Programs from WVU Medical Center/ Charleston Division

Buckhannon, St. Joseph's Hospital, 3rd floor, 3rd Thursday, 7-9 P. M.—Jan., Feb. (winter break)

March 18, "Drug Interaction, Part II," Carl Malanga, Ph.D.

April 15, "Substance Abuse: Food, Alcohol & Drugs," David K. Walker, M. D.

Cabin Creek, Cabin Creek Medical Center, Dawes, 2nd Wednesday, 8-10 A. M.—Jan. 13, "Treating Behavioral Problems in Children and Adolescents" (speaker to be announced).

Feb. 10, "Common Musculo-Skeletal Problems in Children," Robert Ghiz, M. D.

March 10, "Common Endocrinological Problems" (speaker to be announced).

Gassaway, Braxton Co. Memorial Hospital, 1st Wednesday, 7-9 P. M.—Jan., Feb. (winter break).

March 3, "Managing Trauma in the Small Hospital ER and During Transport" (speaker to be announced).

Madison, Madison-Danville Junior High School, West Madison, 2nd Tuesday, 7-9 P. M.—Jan. (winter break).

Feb. 9, "Drug & Alcohol Abuse" (speaker to be announced).

Oak Hill, Oak Hill High School (Oyler Exit, N 19) 4th Tuesday, 7-9 P. M.—Jan. (winter break).

Feb. 23, "Fluid & Electrolyte Balance: Monitoring & Management," Warren Point, M. D.

Welch, Stevens Clinic Hospital, 3rd Wednesday, 11 A. M.-1 P. M.—Jan., Feb. (winter break).

March 17, "Rheumatology Update," Anthony DiBartolomeo, M. D.

April 15, "Thyroid Disease," Richard Kleinmann, M. D.

May 19, "Infectious Diseases in Children," Edwin Anderson, M. D.

Whitesville, Raleigh-Boone Medical Center, 4th Wednesday, 11 A. M.-1 P. M.—Jan., Feb. (winter break).

March 24, "Common Endocrinological Problems," Richard Kleinmann, M. D.

April 28, "Classification & Diagnosis of Diabetes Mellitus," Stephen Grubb, M. D.

Williamson, Appalachian Power Auditorium, 1st Thursday, 6:30-8:30 P. M.—Jan., Feb. (winter break).

March 4, "Obstetrics Update: Labor & Delivery," Narinder Sehgal, M. D.

April 1, "Eye Trauma," George Hamrick, M. D.

Doctor Frost Named Deputy Chief Medical Examiner

James L. Frost, Associate Professor of Pathology in the West Virginia University School of Medicine, has been named Deputy Chief Medical Examiner for the State of West Virginia.

Doctor Frost, who will remain in his present position at WVU, has been serving as Assistant State Medical Examiner for the past four years with responsibility for a 13-county area designated as the North-Central Region. He was one of three principal assistants to State Medical Examiner Irvin M. Sopher, M. D.

Doctor Frost was educated at Princeton University and Johns Hopkins University School of Medicine and served on the Johns Hopkins and University of Maryland medical faculties.

He was Deputy Chief Medical Examiner in Cook County, Chicago, before coming to WVU.

Cardiovascular Symposium Set This Month At Snowshoe

A guest faculty of seven out-of-state physicians will lecture for the Third Mid-Winter Cardiovascular Symposium to be held January 27-30 at the Snowshoe Resort in Pocahontas County.

Evaluation and treatment of coronary artery disease will be the emphasis for the symposium, which is sponsored by the American Heart Association, West Virginia Affiliate; Charleston Division, West Virginia University Medical Center; and Charleston Area Medical Center.

Subjects for discussion will include natural history of coronary artery disease; natural history of asymptomatic patients; conventional and isotopic stress testing; 10-year followup—post-coronary bypass; calcium blockers and beta blockers; intravenous nitroglycerin; percutaneous transluminal angioplasty; exercise prescription; comparison of medical and surgical therapy; rehabilitation; coronary spasm and its role in the pathogenesis of various ischemic heart syndromes; streptokinase infusion in treatment of acute myocardial infarction; treatment of various subsets of patients with spasm; evaluation and management of patients in the first three months post-myocardial infarction; and incidence and significance of coronary artery disease on patients undergoing surgery for peripheral and cerebral vascular disease.

On the faculty will be Drs. Michael Cowley, Assistant Professor of Medicine, Medical College of Virginia; John Flaherty, Assistant Professor of Medicine, Johns Hopkins University School of Medicine; Samuel Fox, Professor of Medicine, Georgetown University;

Carl Pepine, Professor of Medicine, University of Florida; Robert Rosati, Associate Professor of Medicine, Duke University Medical Center;

Arthur J. Roberts, Associate Professor of Surgery, University of Florida; and Kenneth Kent, Chief, Cardiology Branch, National Institutes of Health.

The program meets the criteria for 10 credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association.

Registration will be limited.

For additional information, contact the State Heart Association at (304) 346-5381.

MU Critical Care Conference Scheduled February 13

"Critical Care and Metabolic Disorders" will be the theme for the third annual Rowland H. Burns, M. D., Memorial Critical Care Conference to be held Saturday, February 13 at Marshall University's Memorial Student Center.

The one-day conference, sponsored by the MU School of Medicine, will offer physicians six hours of credit in Category 1 of the Physician's Recognition Award of the American Medical Association, according to C. W. Jones, Ph. D., Marshall's Continuing Medical Education Director.

Topics to be discussed include: "Assessment of Acid Base Disorders;" "Common Plasma Electrolyte Disturbances Including Hypo-Hyperkalemia and Hypo-Hypernatremia;" "Diabetic Comas," and "Hypercalcemia."

Latent image materials also will be used in some sessions.

The conference program is open to all physicians, nurses, residents and other health care professionals who are involved in critical care medicine. "In fact, we are offering separate workshop sessions designed specifically for nurses, with Karen Bray, Head Nurse of the Critical Care Unit at the Braddock, Pennsylvania, General Hospital, as part of the conference faculty," Doctor Jones said.

Also serving as guest faculty will be Dr. Jerome Kassirer, Professor of Medicine and Associate Department Chairman, Tufts University, and Dr. Manuel Tzagournis, Dean and Professor of Medicine, College of Medicine, Ohio State University.

Host Faculty Members

Other faculty members from the host school will include Drs. William I. Sivitz, Assistant Professor of Medicine, and Bruce C. Chertow, Professor of Medicine and Endocrinology Section Chief.

Dr. Charles E. Turner, MU Clinical Associate Professor of Medicine and Conference Planning Chairman, will provide the summation to close the conference. "The late Rowland Burns had a very special interest in critical care medicine and was active in developing intensive care units at both Cabell-Huntington and St. Mary's hospitals," said Doctor Turner, who is a member of the Huntington Internal Medicine Group in which the late Doctor Burns was a senior member. "After his death in 1978, his friends and colleagues decided that the most appropriate memorial to Doctor Burns would be a special medical education fund to be used to provide annual seminars in critical care medicine for health care personnel," Doctor Turner said. The fund was set up through the MU Foundation, he added.

Additional information, including registration deadline and fees, may be obtained by calling the Continuing Medical Education Office at (304) 526-0515.

Council Action Embraces Wide Range of Issues

The Medical Association's Council dealt with a wide range of issues ranging from positions on anticipated 1982 legislative issues to WESPAC and Publication Committee appointments at its November 15, 1981, Fall Meeting.

Approved positions relative to legislation are detailed in a separate story in the news section of this issue of *The Journal*. Here is a summary of other Council action:

—Urged that appropriate contacts be maintained with local medical society presidents as a unit in the West Virginia Department of Health continues development of a recruitment and placement program to meet community needs for physician and other health care services.

—Elected to honorary membership, after appropriate component society action, Drs. Robert M. Ferrell, Lewisburg (Greenbrier Valley Medical Society); Donald G. Hassig and Theodore P. Mantz, both of Charleston, and George Miyakawa, Stuart, Florida (Kanawha Medical); Joseph T. Mallamo, Fairmont (Marion); A. J. Villani, Myrtle Beach, South Carolina (McDowell), and R. H. Fowlkes, Bluefield (Mercer).

—Elected to retired membership Drs. M. G. Stemmermann, Proctorville, Ohio (Cabell), and R. Moore Dodrill, Welch (Mingo).

—Re-elected Dr. L. Walter Fix of Martinsburg to a new seven-year term, to run through calendar 1988, as a member of the Publication Committee.

—Re-elected or elected as nucleus members of the West Virginia Medical Political Action Committee (WESPAC) Board Drs. Stephen D. Ward, Wheeling, First Congressional District; N. B. Groves, Martinsburg, Second District; Joseph T. Skaggs, Charleston, Third District; Frank J. Holroyd, Princeton, Fourth District; and Dr. Joe N. Jarrett, Oak Hill, and Robert F. Bible, Association Staff Counsel, as ex-officio members representing the Council and staff, respectively.

Monitored Closely

—Directed that the Association-endorsed professional liability insurance program, with CNA as the carrier, be monitored closely to insure that physician participants are Medical Association members.

—Authorized placement by West Virginia State Medical Association Properties, Inc., of an advertisement in *The Journal* offering to Association members an opportunity to purchase industrial revenue bonds to be issued toward financing of an Association headquarters building.

—Approved, as recommended by the Ad Hoc Committee on Audit and Budget, a $488,906 Association operating budget for fiscal and calendar 1982, with an understanding that a proposed expenditure of about $20,000 for electronic data processing equipment would be contingent upon further investigation of availability and potential benefits offered by such equipment.

Ashland Oil, Inc., President Robert E. Yancey, left, presents a $100,000 check to Robert W. Coon, M. D., Dean of the Marshall University School of Medicine, during a recent campus luncheon. The gift is the third installment on a three-year, $300,000 pledge by Ashland Oil to assist the development of the MU School of Medicine. Dr. Bernard Queen, Executive Director of the MU Foundation, Inc., said the funds will be used for further development of the School of Medicine as needs arise.

—Directed that a House of Delegates-approved resolution urging appointment of a doctor of medicine to the position of Vice President for Health Sciences at West Virginia University be sent to the new WVU President, E. Gordon Gee, along with copies of previous correspondence expressing the Association recommendation.

—Approved publication of a *Journal* story making known to West Virginia physicians an opportunity to visit China under the People-to-People Program, and urging those interested to contact Doctor Fix at his Martinsburg address.

—Approved introduction by the West Virginia delegation, at the December 6-9 meeting of the American Medical Association House of Delegates, of a resolution asking that retirement be restored as a basis for dues-exempt AMA status for members in the 65 to 70 age range.

Mediation Assistance

—Approved appointment by Dr. John B. Markey, the Association President, of a committee to provide appropriate mediation assistance to Monongalia County physicians involved in a controversy regarding who properly might serve as surgical procedures assistants.

—Heard a discussion of litigation instituted by the Association, and then still pending, to require execution by the Board of Medicine's Executive Secretary of a Board order revoking the license of a Charleston physician convicted on felony charges involving drugs; considered detailed information provided by Doctors Holroyd and Weeks as President and Vice President of the Board with respect to difficult problems faced in implementing current statutes; and in effect voiced support for the Board in its efforts. (The order sought by the Association was granted in Kanawha Circuit Court November 25.)

—Heard from Mrs. Logan Hovis of Parkersburg, President of the Medical Association Auxiliary, a commitment to provide cooperation and assistance in the Association's legislative and other work.

State EENT Group Announces Spring Meeting Program

The West Virginia Academy of Ophthalmology and Otolaryngology will hold its National Spring Meeting next May 2-5 at the Greenbrier in White Sulphur Springs.

Ophthalmology speakers will be: Drs. William Harris, Dallas; Herbert Kaufman, New Orleans;

Paul R. Lichter, Ann Arbor, Michigan; William H. Spencer, San Francisco, and Harold Stein, Toronto, Ontario, Canada.

Otolaryngology speakers will be: Drs. Gale Gardner, Memphis, Tennessee; Captain Vince Hyams, Washington, D. C.; Donald Nalebluff, Teaneck, New Jersey, and Captain Fred Stuckers, Bethesda, Maryland.

Discussion subjects will include argon laser trabecular surgery; refractive keratoplasty; intraocular lens and extended-wear lens; facial plastic, head and neck surgery; otolaryngic allergy, and otology.

The program is approved for credit in Category 1 of the Physician's Recognition Award of the American Medical Association.

Write directly to the Greenbrier, White Sulphur Springs 24986 for hotel accommodations. An advance registration fee of $175 is required. Make checks payable to The West Virginia Academy of O & O, and mail to J. Elliott Blaydes, M. D., Frederick & Woodland, Bluefield 24701.

Women's Health Papers Sought By WVU

Papers and other presentations are being sought for an interdisciplinary conference focusing on women's health next September 30-October 2 at West Virginia University in Morgantown.

Co-sponsors are the WVU Council for Women's Concerns, the WVU Women's Studies Program, and the North Central Women's Studies Association.

"Focus on Women and Health: Taking Care and Taking Charge" will be the title of the conference.

Desired areas of information relating to women include facts about health and health care; perspectives (cultural, historical, psychological) on understanding and defining health; and public policy and education concerning health.

March 1 will be the deadline for proposals.

Abstracts may be sent, or questions directed, to Judith Stitzel, Coordinator, Women's Studies Program, WVU, Morgantown 26506. Telephone (304) 293-2339.

Council Approves Positions On Legislative Issues

The material below represents positions recommended by the Medical Association's Committee on Legislation, and approved by Council at its November 15, 1981, meeting, relative to legislative issues anticipated in the 1982 session to begin January 13.

The Council action was communicated to secretaries of the Association's 29 component societies under date of November 19 with an urgent request that local-level membership be made aware of the legislative positions; and that secretaries solicit any reaction or suggestions from component society members.

The Association's State Headquarters also asked that it be advised of any other items or concerns at the component society level that members would like to see addressed in the upcoming session. That request is reiterated here.

Now, here are the positions as approved by Council on anticipated 1982 legislative issues:

Patient Access to Medical Records: delay any statement of position until an opportunity to review a model bill being developed by the American Medical Association is available; *Severability Clause in the Medical Practice Act*: approve a bill to add this clause to the Act as a safeguard against all of the statute possibly being invalidated if a portion might be thrown out by the courts; *Optometry*: support legislation that might be introduced for appropriate limitation or regulation of the scope of practice of optometrists, legislation that might be offered by a group other than the State Medical Association (the Association itself will sponsor no such bills).

Medical Expert

Expert Certification of Medical Malpractice Suits: support legislation to require the disclosure of the plaintiff's medical expert within a reasonable time of the filing of a malpractice action; *Continuing Medical Education as a Requirement for License Renewal*: oppose any bill mandating CME as a requirement for medical re-licensure; *Galactosemia*: support legislation to require galactosemia to be added to the routine required newborn tests; *Laboratory Cost Disclosure*: continue conditional opposition to such legislation which could add additional administrative burdens and costs without patient benefit.

Hospital Board Composition: oppose any effort to legislate composition of hospital boards of trustees; *Nurse Practitioners*: continue opposition to any bill to mandate third-party reimbursement of nurses, and efforts to broaden the

scope of practice of nurse practitioners by legislation rather than regulation; *Physician Assistant*: oppose any proposals to enlarge the scope of practice of such assistants (beyond recognized and accepted levels of training and experience); *Hospital Cost Containment*: withhold any statement of position until an opportunity to review any bills actually introduced; *Budgets for 1982-83 for Departments of Health and Welfare*: monitor closely legislative action to take all possible steps against reduction in vital medical and other services; *Medical Education*: development by the Medical Association of a resolution calling for a detailed study of undergraduate medical education in West Virginia with emphasis on the quality as well as the cost effectiveness of such education.

Uniform Determination of Death Act: The Association certainly will support a bill developed in an interim committee to supersede and broaden the Uniform Brain Death Act endorsed by the Association and adopted by the Legislature in 1980. In addition to existing brain death provisions, the new bill would codify the existing common law basis for determining death—that is, total failure of the cardiorespiratory system.

Trip To China Offered State Physicians

West Virginia physicians are invited to make a trip to mainland China through the "People to People" Program.

The 15-day trip may be arranged for any time in 1982 and will include working sessions in hospitals exchanging information. Cities which will be visited in conjunction with the trip include Peking, Canton, Shanghai, Hong Kong and Tokyo.

Spouses may accompany physicians.

The cost is $3,200, which includes lodging, meals, air travel from the West Coast, baggage handling, and all incidental expenses. There will be a special discount on air tickets for the domestic portion of the flight.

For additional information, contact Dr. L. Walter Fix, Route 7, Maple Manor, Martinsburg 25401. Telephone 263-7119.

Conference On Impaired Health Professionals March 5

A conference on "Impaired Health Care Professionals: A Challenge to the Professions" will be held on Friday, March 5, in Detroit.

Sponsors will be the American Society of Law and Medicine and five Michigan health care and other groups, including the Michigan State Medical Society.

Those invited to attend are physicians, nurses, hospital administrators, attorneys, social workers and others concerned about impaired health care professionals.

For program and registration information, contact American Society of Law & Medicine, 765 Commonwealth Avenue, 16th Floor, Boston, Massachusetts 02215. Telephone (617) 262-4990.

Room reservations may be made at the conference hotel, the Detroit Plaza Hotel, Renaissance Center, Detroit, Michigan 48243. Telephone (313) 568-8000.

Dr. Charles E. Andrews Given CAMC Service Award

Dr. Charles E. Andrews, Professor of Medicine at West Virginia University School of Medicine, has been awarded Charleston Area Medical Center's "Health Service Award."

Doctor Andrews is former Provost and Vice President for Health Sciences at WVU. He was instrumental in the development of the 1972 affiliation agreement between WVU and CAMC, and served as Project Director for the Area Health Education Center in Charleston.

He is the third recipient of the award presented to a person whose contributions are national or international in scope and have had a direct or indirect impact in the local area.

Others to win the award are Dr. Merlin Duval, former U.S. Under Secretary of the Department of Health, Education and Welfare, and Dr. John A. D. Cooper, President of the American Association of Medical Colleges.

Doctor Walker Receives Honorary Degree

Dr. James H. Walker, Charleston surgeon, was awarded an honorary Doctor of Humane Letters Degree from West Virginia Wesleyan College during recent Founders' Day activities on the campus.

Doctor Walker, a 1937 graduate of Wesleyan, is a Governor of the American College of Cardiology and The American College of Chest Physicians.

He is a Clinical Professor of Surgery for the West Virginia and Georgetown University Schools of Medicine.

Vocational Rehabilitation Honors Doctor Ryan

Dr. Ralph W. Ryan, Morgantown ophthalmologist, recently was presented with the Reger Distinguished Service Award during the annual meeting of the West Virginia Division of Vocational Rehabilitation at Jackson's Mill.

Doctor Ryan, a former member of the Association's Council, was given the award for his rehabilitation service to the blind and visually impaired in the state.

He was credited with: being instrumental in sight restoration on numerous cases for the Division and the West Virginia Sight Conservation Foundation; developing methods for diagnosing and treating toxoplasmosis successfully; helping to identify the epidemic virus called "pink eye;" contributing to the knowledge of histoplasmosis; and playing a major role in helping establish the National Eye Institute in 1969.

The Harley B. Reger Foundation is a nonprofit corporation which was formed in the 1960s following the death of Reger, a former Division rehabilitation counselor and administrator.

New Video Tapes Available From AMA Library

Two new programs—*Primary Care of Common Sexual Problems and Chronic Obstructive Pulmonary Disease* — have been added to the American Medical Association Video Clinic library. A total of 17 programs in video cassette format now are available for rental or sale.

AMA Video Clinics are comprehensive two- to six-hour study courses that analyze the physiology, diagnosis, treatment and prognosis on the topics. Each clinic is available in three formats: U-Matic (¾"), Betamax (½") and VHS (½").

All Video Clinics are sponsored and recognized by the AMA for Category I Credit towards the AMA Physician's Recognition Award.

Each AMA Video Clinic consists of a color video tape, study guide, self-assessment tests, and either may be rented or purchased.

For further information, contact the Division of Marketing and Meeting Services, American Medical Association, 535 North Dearborn, Chicago, Illinois 60610. Telephone (312) 751-5951.

Medical Meetings

Jan. 22-24—15th Mid-Winter Clinical Conference, Charleston.

Jan. 22-25—Am. College of Nuclear Physicians, Tucson, AZ.

Jan. 25-27—Am. Society for Laser Med. & Surgery, Hilton Head Island, S. C.

Feb. 3-7—Am. College of Psychiatrists, Orlando, Fla.

Feb. 13—Critical Care Conference (MU), Huntington.

Feb. 25-28—AMA National Leadership Conference, Chicago.

March 1-3—Southeastern Surgical Conference, Bal Harbour, Fla.

March 3-8—International Conference of the Assn. for Children & Adults With Learning Disabilities, Chicago.

March 4-6—Am. College of Obstetricians & Gynecologists, Big Sky, MT.

March 5—Impaired Health Care Professionals (Am. Society of Law & Med., MI State Med. Society, etc.), Detroit.

March 5-7 — Cardiovascular Disease Epidemiology (Council on Epidemiology, Am. Heart Assn.; & National Heart, Lung & Blood Institute), San Antonio.

March 5-10—Am. Society of Abdominal Surgeons, Las Vegas.

March 17-20—Neurosurgical Society of Am., Marco Island, Fla.

March 20-25—Am. Academy of Pediatrics, Honolulu.

March 21-25—Am. Fertility Society, Las Vegas.

April 15-18— WV Chapter, AAFP, Morgantown.

April 22-23—WV Chapter, Am. Academy of Pediatrics, Morgantown.

April 25-27 — Am. Society of Clinical Oncology, St. Louis.

April 25-29—Am. College of Cardiology, Atlanta.

April 26-29—Am. College of Obstetricians & Gynecologists, Dallas.

May 2-5—WV Academy of Ophthalmol. & Otolaryngol., White Sulphur Springs.

May 5-6—Am. Society for Head & Neck Surgery, Palm Beach, Fla.

May 10-14 — Am. Roentgen Ray Society, New Orleans.

May 13-16 — Federation of State Medical Boards, New Orleans.

May 16-20—Am. Urological Assn., Kansas City, Mo.

June 13-17 — Annual Meeting of AMA House of Delegates, Chicago.

Aug. 26-28—115th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Sept. 4-7—AAFP, San Francisco.

Sept. 30 - Oct. 2 — Women's Health Conference (WVU), Morgantown.

Oct. 30-Nov. 2—Southern Med. Assn., Atlanta.

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WVU Medical Center
–News–

Compiled from material furnished by the Medical Center News Service, Morgantown, W. Va.

Ambulatory Care Facility Advised In Report

Hospital consultants hired by the West Virginia Board of Regents have recommended construction of an ambulatory care facility at WVU Medical Center to help meet changing educational needs.

M. Bostin Associates of New York City, reporting on a study of the Medical Center, said a new building is essential because of growing emphasis on education for outpatient care and the expected growth in numbers of clinic patients.

The proposed new building would house outpatient clinics, the WVU Family Practice Center, one-day surgery patients, diagnostic radiology and some faculty offices.

"The study showed conclusively that the Medical Center needs a new ambulatory care facility to continue its tradition of excellence in the education of undergraduate and graduate medical students," the report observed.

Bostin, a hospital and health services consulting firm, was commissioned by the Board of Regents 14 months ago to make the study.

Number of Patients Evaluated

The 200-page report evaluated the number of patients needed to support current and projected education programs, and estimated whether those volumes could be reached. It also described deficiencies in present facilities and projected what was needed to correct them.

It was noted that health care delivery systems have increased their emphasis on caring for patients without admitting them to costly hospital beds, and that this change has had a major impact on medical education.

"Ambulatory-service activity has become an essential component of the educational-training experience of the medical student and resident, student nurse, physician extender, nurse practitioner and a variety of technologists in the adjunct diagnostic and therapeutic fields," the report commented.

The Medical Center has an enrollment of more than 1,500 in the health sciences, while outpatient visits at University Hospital number about 200,000 a year, including nearly 40,000 in the emergency department.

Doctor Waldman In National, International Groups

Robert H. Waldman, M. D., Professor and Chairman of the Department of Medicine, has been elected to membership in the American Clinical and Climatological Association.

Members of the century-old organization mainly are internal medicine physicians in academics or private practice. They number about 300, and new members are admitted only when old ones die or retire. Doctor Waldman is the second member from West Virginia.

The "climatological" part of the Society's name results from the fact that when it was formed 100 years ago the impact of climate on health and disease was a matter of much concern among clinicians.

Doctor Waldman, who joined the WVU faculty in 1976, heads the largest department in the School of Medicine. He is a graduate of the Washington University School of Medicine and a specialist in infectious diseases.

Doctor Waldman recently attended his first meeting as a member of the International Commission on Pulmonary Immunology at Lyons, France. He is the only American in the 12-member group, which is appointed by the International Organization on Aerosols in Medicine.

The Commission evaluates research in its field and makes recommendations as to what the most promising thrust of research will be in the near future. Proceedings of the meeting will be published in a French journal.

Other members represented on the Commission come from France, West Germany, East Germany, Italy, Poland, Japan and the Soviet Union.

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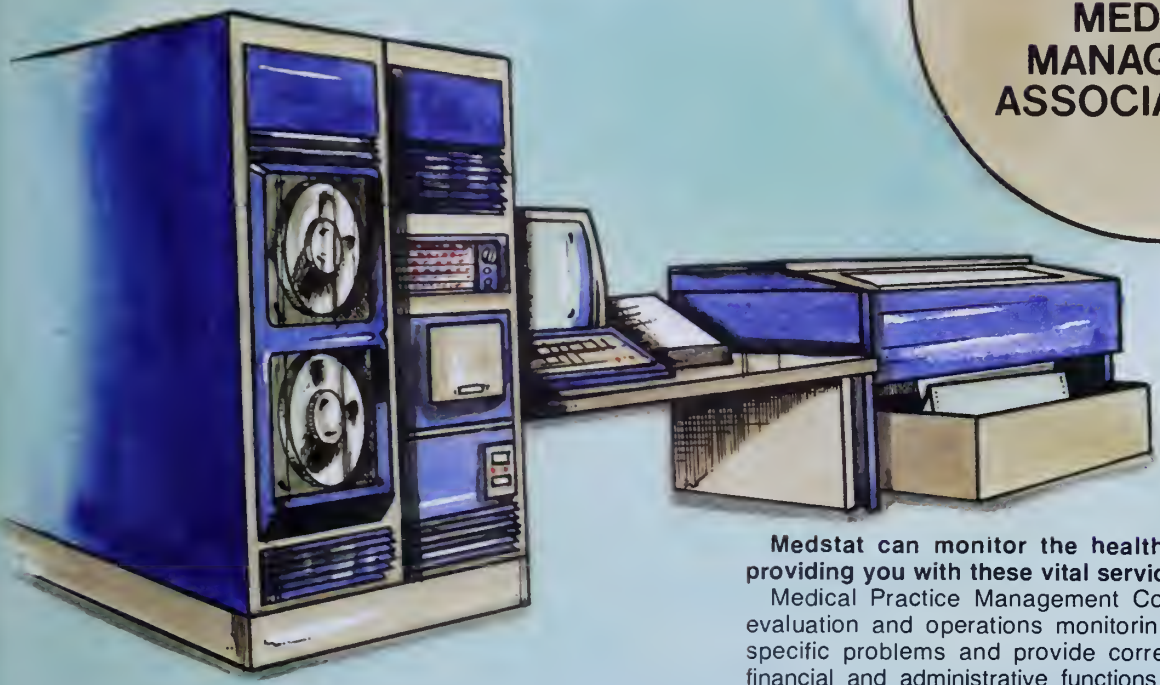

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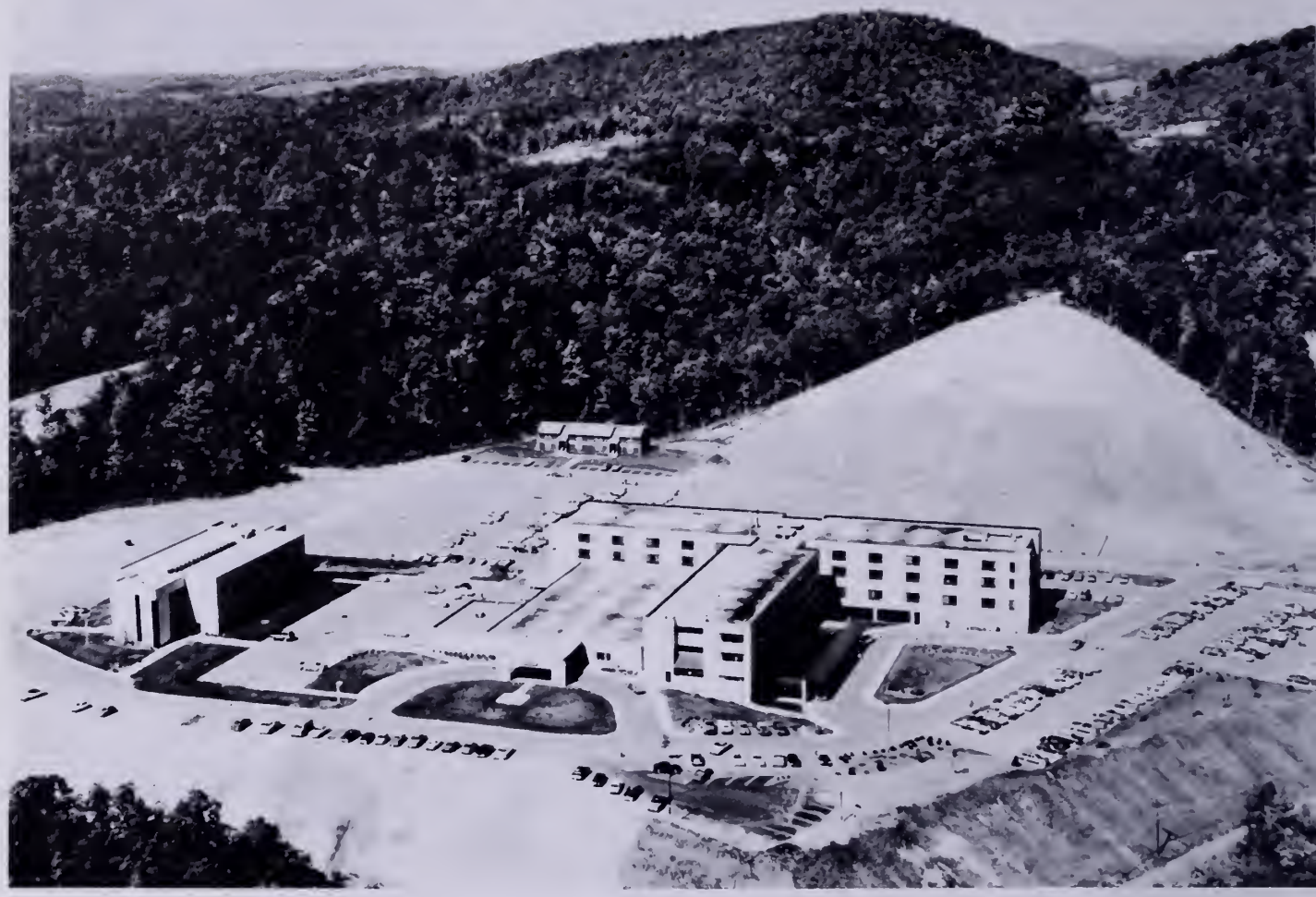

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Third-Party News, Views and Program Concerns

Open Season For Choosing Health Plan Appealed

The government is appealing a court order for an open season for the private health insurance plans for federal workers, claiming an open season could jepoardize the Blue Cross-Blue Shield plan that covers about half the government work force.

United States District Court Judge Aubrey Robinson, acting on appeals from employee unions, ordered a two-week open season to allow the 9.2 million people covered under the Federal Employe Health Benefit program (FEHB) to choose other plans. The Office of Personnel Management (OPM) opposed the open season, apparently fearing adverse selection could work against the Blues.

OPM Director Donald Devine said an open season "threatens the integrity and perhaps even the survival" of the government's program.

He said the Blues might have to pull out of the program. Earlier, Blues' officials contended their plans might dip into the red unless they are allowed to trim mental health benefits, presently among the most liberal in the nation.

Psychiatric Groups Object

Psychiatric groups led by the American Psychiatric Association asked the District Court to prohibit the proposed cutbacks in benefits, labeling the move "second-rate public policy which if allowed would make second-class citizens out of thousands of seriously mentally-ill persons."

The reduction in benefits for the Blues would involve limiting inpatient hospital stays to 60 days and outpatient psychiatric visits to 50 a year. The patients would be asked to pay half the outpatient costs instead of the present 30 per cent.

Devine had ordered the 126 health plans that participate in the federal employee program to reduce benefits by 12.5 per cent while the premium costs would rise nine per cent in order to keep the plans on a sound financial footing. The government pays 60 per cent of the premium.

There have been resolutions introduced in Congress to continue the present benefit structure until Congress has a chance to study the situation, but there has been no final action so far.

Supreme Court To Review Antitrust Cases

The Supreme Court this term is slated to fix important boundaries on the application of the federal antitrust laws to medicine.

At least four cases have been accepted for review so far. One of the latest involves a Blue Shield plan's exclusion of payments for psychologists and the practice of peer review by physicians committees of insurance reimbursement claims.

Previously, the Supreme Court had agreed to rule on the American Medical Association's challenge to the Federal Trade Commission's action against ethical advertising codes and the question of maximum fee schedules for medical foundations.

The decision on these cases are not expected until Spring.

The Blue Shield case involved two Virginia plans that excluded payment for clinical psychologists. The Fourth U. S. Circuit Court of Appeals upheld the suit against the plans, charging a violation of antitrust laws.

If the high court's ruling is broad enough, it could have an impact on the question of whether health insurance can limit mental health benefits to treatment by psychiatrists or those acting under psychiatrists' direcions.

The high court also will consider a case by a New York chiropractor who argued that the peer review process by insurance companies operated to set an upper limit on fees, a practice he charged is price-fixing and thus a restraint of trade.

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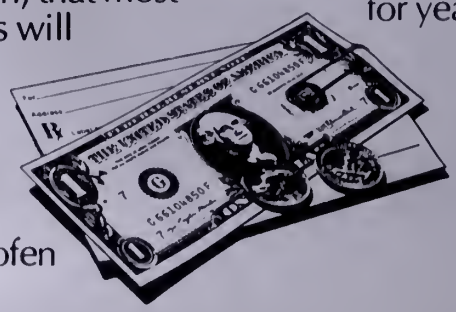

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CONTRAINDICATIONS: Patients hypersensitive to ibuprofen, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory drugs (see WARNINGS).

WARNINGS: Anaphylactoid reactions have occurred in patients hypersensitive to aspirin (see CONTRAINDICATIONS). Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Peptic ulceration, perforation, or gastrointestinal bleeding can end fatally; however, an association has not been established. Rufen should be given under close supervision to patients with a history of upper gastrointestinal tract disease, and only after consulting the ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be attempted. If Rufen must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

PRECAUTIONS: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If developed, discontinue Rufen and administer an ophthalmologic examination.

Fluid retention and edema have been associated with Rufen; caution should be used in patients with a history of cardiac decompensation.

Rufen can inhibit platelet aggregation and prolong bleeding time. Use with caution in patients with intrinsic coagulation defects and those taking anticoagulants.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy, this therapy should be tapered slowly when adding Rufen.

DRUG INTERACTION: *Coumarin-type anticoagulants.* The physician should be cautious when administering Rufen to patients on anticoagulants.

Aspirin. Concomitant use may decrease Rufen blood levels.

PREGNANCY AND NURSING MOTHERS: Rufen should not be taken during pregnancy nor by nursing mothers.

ADVERSE REACTIONS

Incidence greater than 1%

Gastrointestinal: The most frequent adverse reaction is gastrointestinal (4% to 16%). Includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of GI tract (bloating and flatulence). **Central Nervous System:** dizziness*, headache, nervousness. **Dermatologic:** rash* (including maculopapular type), pruritus. **Special Senses:** tinnitus. **Metabolic:** decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

*Incidence 3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: gastric or duodenal ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** depression, insomnia. **Dermatologic:** vesiculobullous eruptions, urticaria, erythema multiforme. **Special Senses:** amblyopia (see PRECAUTIONS). **Hematologic:** leukopenia, decreased hemoglobin and hematocrit. **Cardiovascular:** congestive heart failure in patients with marginal cardiac function, elevated blood pressure.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** paresthesias, hallucinations, dream abnormalities. **Dermatologic:** alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** hemolytic anemia, thrombocytopenia, granulocytopenia bleeding episodes. **Allergic:** fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** gynecomastia, hypoglycemia. **Cardiovascular:** arrhythmias (Sinus tachycardia, bradycardia, and palpitations). **Renal:** decreased creatinine clearance, polyuria, azotemia.

OVERDOSAGE: Acute overdosage, the stomach should be emptied. Rufen is acidic and excreted in the urine, alkaline diuresis may benefit.

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For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. Limited clinical information presently available on effectiveness of treatment of otitis media with Bactrim when infection is due to ampicillin-resistant *Haemophilus influenzae*. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.

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Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; patients with documented megaloblastic anemia due to folate deficiency; pregnancy at term; nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus, infants less than 2 months of age.

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Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.

Pregnancy: Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

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Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.

Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.

For patients with renal impairment: Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.

ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS IN ADULTS:

Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 14 days.

PNEUMOCYSTIS CARINII PNEUMONITIS:

Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: *Double Strength (DS) tablets*, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100; Prescription Paks of 20 and 28. *Tablets*, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40. *Pediatric Suspension*, containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); cherry-flavored—bottles of 100 ml and 16 oz (1 pint). *Suspension*, containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); fruit-licorice flavored—bottles of 16 oz (1 pint).

ROCHE®
ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Bactrim™ succeeds

in recurrent urinary tract infections*

from site to source

Bactrim continues to demonstrate high clinical effectiveness in recurrent urinary tract infections. Bactrim reaches effective levels in urine, serum, and renal tissue[1]...the trimethoprim component diffuses into vaginal secretions in bactericidal concentrations[1]... and in the fecal flora, Bactrim effectively suppresses Enterobacteriaceae[1,2] with little resulting emergence of resistant organisms.

1. Rubin RH, Swartz MN: *N Engl J Med 303*:426-432, Aug 21, 1980. 2. Data on file, Medical Department, Hoffmann-La Roche Inc.

Bactrim™ DS

160 mg trimethoprim and 800 mg sulfamethoxazole

DOUBLE STRENGTH TABLETS

maximizes results with B.I.D. convenience

ROCHE®

* due to susceptible strains of indicated organisms

Please see previous page for summary of product information.

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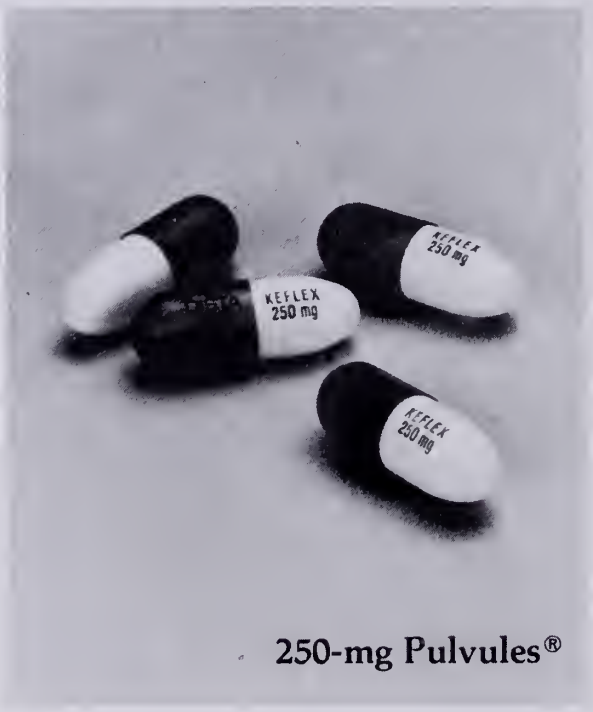
Volume 78 Number 2
February 1982

easy to take



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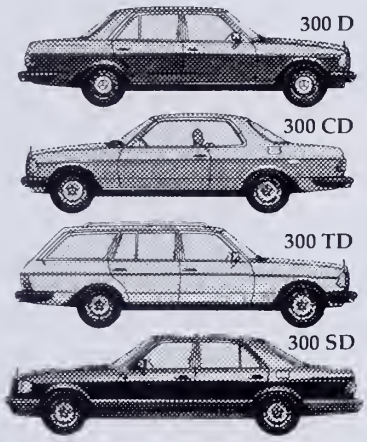

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LINDE HOMECARE NEWS

PRESS RELEASE

Brought to you by:
LINDE HOMECARE MEDICAL SYSTEMS
135 Seventh Avenue
South Charleston, WV 25303
Phone 744-4745

New Medicare Guidelines for Home Oxygen

1) Arterial blood gases must be done for all home oxygen patients. These studies must be done on room air and reflect a pO_2 of 62 or below.
2) Severe Chronic Congestive Heart Failure (CHF) will be the only acceptable cardiac diagnosis that will be considered.
3) Diagnostic classifications must fall in one of the following categories:

   A) Chronic Obstructive Lung Disease
      1) Limited to Emphysema, Chronic Bronchitis, and Bronchiectasis.
   B) Chronic Interstitial Pneumonia
   C) Chronic Interstitial Pulmonary Infiltrate-type Pulmonary Diseases such as Pulmonary Fibrosis from extensive Tuberculosis, Eosinophilia Granuloma, Idiopathic Fibrosis, and Pneumoconiosis.
   D) Pulmonary Hypertension
   E) Secondary Polycythemia

4) Medicare regulations specifically prohibit the coverage of pre-set stand-by or emergency oxygen.
5) Portable oxygen units will only be considered if the person is immobile without the use of mechanical oxygen.

If you have other questions concerning Medicare regulations, please call us. Thank You.

LINDE HOMECARE MEDICAL SYSTEMS
"Specialists in Home Oxygen Therapy."

BEWARE
THE
WINTER
WEATHER!

RU-TUSS®

Dispel the Clouds of Fall and

RU-TUSS®

TABLETS

Each prolonged action tablet contains: Phenylephrine Hydrochloride 25 mg • Phenylpropanolamine Hydrochloride 50 mg • Chlorpheniramine Maleate 8 mg • Hyoscyamine Sulfate 0.19 mg • Atropine Sulfate 0.04 • Scopolamine Hydrobromide 0.01 mg • Each Ru-Tuss tablet acts continuously for 10 to 12 hours.

Symptomatic Relief of Sneezing and Nasal Congestion

Comprehensive decongesting, antihistaminic and anti-secretory reliever for patients with nasal, sinus and other upper respiratory irritation.

- Eases breathing • Reduces sneezing
- Reduces tearing • Dries the drip

One tablet b.i.d. gives round-the-clock relief to adults and older children (12 years and over).

RELIEVERS

Winter Respiratory Discomfort

RU-TUSS®

EXPECTORANT

Each fluid ounce contains: Codeine Phosphate 65.8 mg • (WARNING: MAY BE HABIT FORMING) Phenylephrine Hydrochloride 30 mg • Phenylpropanolamine Hydrochloride 20 mg • Pheniramine Maleate 20 mg • Pyrilamine Maleate 20 mg • Ammonium Chloride 200 mg • Alcohol 5%

Symptomatic Relief of Coughing with Nasal and Bronchial Decongestion

Full range symptom-reliever for patients with air way congestion in the upper chest as well as the nose and throat.

- Blocks the cough
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- Reduces sneezing
- Eases breathing
- Tasty, so it's easy to take

To Relieve the Symptoms of Winter Weather Upper Respiratory Distress

RU-TUSS®/RU-TUSS®

TABLETS EXPECTORANT

RU-TUSS®

Tablets

DESCRIPTION

Each prolonged action tablet contains:

Phenylephrine Hydrochloride	25 mg
Phenylpropanolamine Hydrochloride	50 mg
Chlorpheniramine Maleate	8 mg
Hyoscyamine Sulfate	0.19 mg
Atropine Sulfate	0.04 mg
Scopolamine Hydrobromide	0.01 mg

Ru-Tuss Tablets act continuously for 10 to 12 hours.

Ru-Tuss Tablets are an oral antihistaminic, nasal decongestant and anti-secretory preparation.

INDICATIONS AND USAGE Ru-Tuss Tablets provide relief of the symptoms resulting from irritation of sinus, nasal and upper respiratory tract tissues. Phenylephrine and phenylpropanolamine combine to exert a vasoconstrictive and decongestive action while chlorpheniramine maleate decreases the symptoms of watering eyes, post nasal drip and sneezing which may be associated with an allergic-like response. The belladonna alkaloids, hyoscyamine, atropine and scopolamine further augment the anti-secretory activity of Ru-Tuss Tablets.

CONTRAINDICATIONS Hypersensitivity to antihistamines or sympathomimetics. Ru-Tuss Tablets are contraindicated in children under 12 years of age and in patients with glaucoma, bronchial asthma and women who are pregnant. Concomitant use of MAO inhibitors is contraindicated.

WARNINGS Ru-Tuss Tablets may cause drowsiness. Patients should be warned of the possible additive effects caused by taking antihistamines with alcohol, hypnotics, sedatives or tranquilizers.

PRECAUTIONS Ru-Tuss Tablets contain belladonna alkaloids, and must be administered with care to those patients with glaucoma, or urinary bladder neck obstruction. Caution should be exercised when Ru-Tuss Tablets are given to patients with hypertension, cardiac or peripheral vascular disease or hyperthyroidism. Patients should avoid driving a motor vehicle or operating dangerous machinery (See Warnings).

OVERDOSAGE Since the action of sustained release products may continue for as long as 12 hours, treatment of overdoses directed at reversing the effects of the drug and supporting the patient should be maintained for at least that length of time. Saline cathartics are useful for hastening evacuation of unreleased medication. In children and infants, antihistamine overdosage may produce convulsions and death.

ADVERSE REACTIONS Hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis, and thrombocytopenia may occur. Other adverse reactions to Ru-Tuss Tablets may be drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, tachycardia, hypotension/hypertension, faintness, dizziness, tinnitus, headache, incoordination, visual disturbances, mydriasis, xerotomia, blurred vision, anorexia, nausea, vomiting, diarrhea, constipation, epigastric distress, hyperirritability, nervousness, dizziness and insomnia. Large overdoses may cause tachypnea, delirium, fever, stupor, coma and respiratory failure.

DOSAGE AND ADMINISTRATION Adults and children over 12 years of age, one tablet morning and evening. Not recommended for children under 12 years of age. Tablets are to be swallowed whole.

HOW SUPPLIED:

Bottles of 100 Tablets	NDC 0524-0058-01
Bottles of 500 Tablets	NDC 0524-0058-05

Federal law prohibits dispensing without prescription.

RU-TUSS®

Expectorant

DESCRIPTION

Each fluid ounce of Ru-Tuss Expectorant contains:

Codeine Phosphate	65.8 mg
(WARNING: MAY BE HABIT FORMING)	
Phenylephrine Hydrochloride	30 mg
Phenylpropanolamine Hydrochloride	20 mg
Pheniramine Maleate	20 mg
Pyrilamine Maleate	20 mg
Ammonium Chloride	200 mg
Alcohol	5%

Ru-Tuss Expectorant is an oral antitussive, antihistaminic, nasal decongestant and expectorant preparation.

INDICATIONS AND USAGE Ru-Tuss Expectorant is indicated for symptomatic relief of upper respiratory congestion associated with pharyngitis, tracheitis, bronchitis, and allergic rhinitis. Also, for the temporary relief of symptoms associated with hay fever, allergies, nasal congestion and cough due to the common cold.

CONTRAINDICATIONS Hypersensitivity to antihistamines. Concomitant use of an antihypertensive or antidepressant drug containing a monoamine oxidase inhibitor is contraindicated.

Ru-Tuss Expectorant is contraindicated in patients with glaucoma, bronchial asthma and in women who are pregnant.

WARNINGS Ru-Tuss Expectorant contains codeine phosphate, therefore, the patient should be warned of the potential that this drug may be habit forming. Ru-Tuss Expectorant may cause drowsiness. Patients should be warned of the possible additive effect caused by taking antihistamines with alcohol, hypnotics, sedatives and tranquilizers.

PRECAUTIONS Patients taking Ru-Tuss Expectorant should avoid driving a motor vehicle or operating dangerous machinery (See Warnings). Caution should be taken with patients having hypertension, diabetes, hyperthyroidism and cardiovascular disease.

Caution should also be used in patients with pulmonary, hepatic or renal insufficiency.

ADVERSE REACTIONS Ru-Tuss Expectorant may cause drowsiness, lassitude, giddiness, dryness of mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, tachycardia, hypotension hypertension, faintness, dizziness, tinnitus, headache, incoordination, visual disturbances, mydriasis, xerostomia, blurred vision, anorexia, nausea, vomiting, diarrhea, constipation, epigastric distress, hyperirritability, nervousness, and insomnia. Overdoses may cause restlessness, excitation, delirium, tremors, euphoria, metabolic acidosis, stupor, tachycardia and even convulsions.

DOSAGE AND ADMINISTRATION Adults: 1 or 2 teaspoonfuls, orally, every 4 hours, not to exceed 10 teaspoonfuls in any 24-hour period.

Children 6 to 12 years of age: ½ the adult dose, not to exceed 6 teaspoonfuls in any 24-hour period. Children 2 to 6 years of age: ½ teaspoonful every 4 hours, not no exceed 3 teaspoonfuls in any 24-hour period. Children under 2 years of age: Use as directed by a physician.

HOW SUPPLIED: (16 fl. oz.)

Pint Bottles	NDC 0524-1010-16

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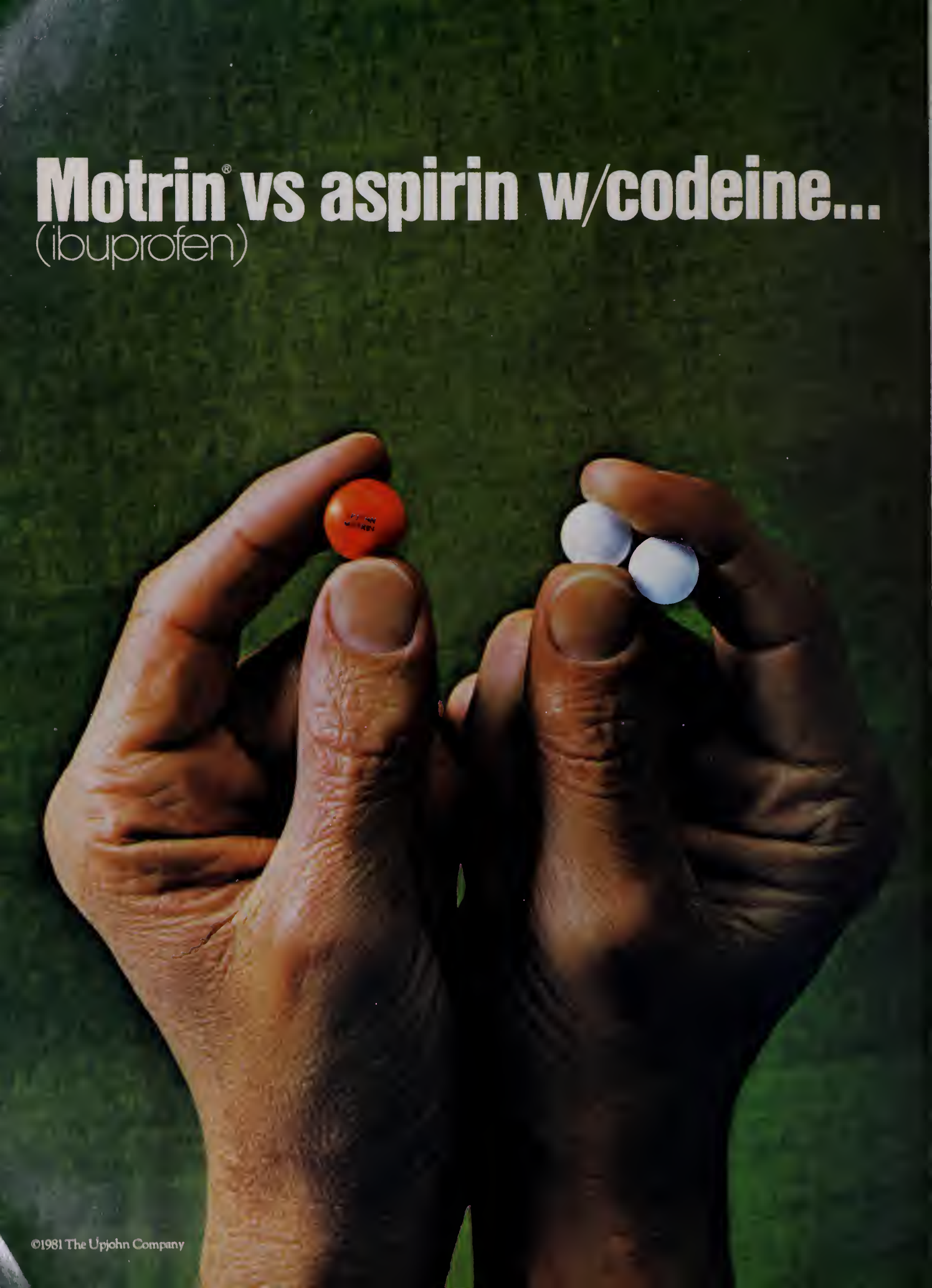
Motrin® vs aspirin w/codeine...
(ibuprofen)

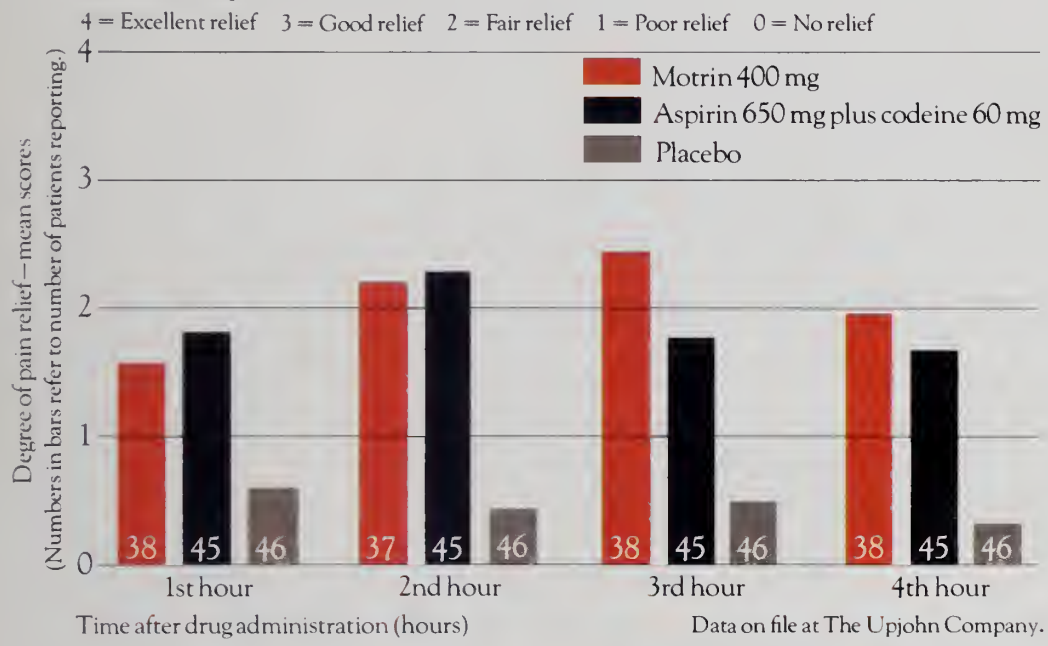


©1981 The Upjohn Company

compare the analgesic effect

A *Motrin* 400 mg dose relieved postsurgical dental pain as effectively as a combination of 650 mg aspirin and 60 mg codeine (two aspirin-with-codeine No. 3 tablets) in a study of 129 patients. In this double-blind, placebo-controlled, randomized study, no statistically significant difference in relief of pain was noted at 1, 2, and 4 hours between the *Motrin* and aspirin-with-codeine groups... with *Motrin* being significantly more effective ($p = 0.03$) at the three-hour interval. Active treatment was significantly more effective ($p < 0.0001$) than placebo at all time intervals.

Comparison of pain relief
Motrin vs aspirin-codeine combination



Data on file at The Upjohn Company.

One tablet q4-6h prn
For relief of mild to moderate pain:

Motrin® 400 mg TABLETS
ibuprofen, Upjohn

• Not a narcotic • Not addictive • Not habit forming • Nonscheduled • Acts peripherally • Relieves pain rapidly • Relieves inflammation • Indicated in acute and chronic pain • Well tolerated (The most common side effect with *Motrin* is mild gastrointestinal disturbance.)

Please turn the page for a brief summary of prescribing information.

Upjohn

Motrin® (ibuprofen)
now proved an effective analgesic for mild to moderate pain

Motrin® Tablets (ibuprofen, Upjohn)

Indications and Usage: Relief of mild to moderate pain.

Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Contraindications: Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

Warnings: Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

Drug interactions. *Aspirin:* Used concomitantly may decrease Motrin blood levels. *Coumarin:* Bleeding has been reported in patients taking Motrin and coumarin.

Pregnancy and nursing mothers: Motrin should not be taken during pregnancy nor by nursing mothers.

Adverse Reactions

Incidence greater than 1%

Gastrointestinal: The most frequent type of adverse reaction occurring with Motrin is gastrointestinal (4% to 16%). This includes nausea,* epigastric pain,* heartburn,* diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness,* headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

*Incidence 3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

Overdosage: In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

Dosage and Administration: Rheumatoid arthritis and osteoarthritis, including flares of chronic disease. Suggested dosage is 300, 400, or 600 mg t.i.d. or q.i.d.
Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for relief of pain.
Do not exceed 2400 mg per day.

Caution: Federal law prohibits dispensing without prescription.

For additional product information, see your Upjohn representative or consult the package insert.

Upjohn THE UPJOHN COMPANY
Kalamazoo, Michigan 49001 USA

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MARCH 1981

It's time we took arthritis seriously

It's a myth that arthritis is just the minor aches and pains of old age. It's a major crippler that attacks. Anybody. Anytime. 31 million Americans have it. There are almost a million new cases a year. And six out of ten are under 60. Symptoms can come and go for years. So if you don't know the warning signals, find out. If you'd like information that could help you—or you'd like to help us—write to the Arthritis Foundation, Box 19000, Atlanta, GA 30326.

ARTHRITIS FOUNDATION

The West Virginia Medical Journal

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MEMBER, WEST VIRGINIA PRESS ASSOCIATION, 1982

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DRAMATIC NEW CLINICAL PROOF*

In the treatment of impetigo–

- **100% cure rate with Tegopen®** (cloxacillin sodium)
- **only a 60% cure rate with penicillin V-K**

As seen on admission

After one week of penicillin V-K therapy

Two weeks after initiation of TEGOPEN therapy

Treatment failure was judged to have occurred when lesions increased in size and/or number during the initial week of treatment with penicillin V-K. *No* treatment failures occurred with Tegopen.

*Data on file, Bristol Laboratories.

Brief Summary of Prescribing Information

TEGOPEN®
(cloxacillin sodium)
Capsules and Oral Solution

For complete information, consult Official Package Circular. (12) 9/11/75

INDICATIONS:

Although the principal indication for cloxacillin sodium is in the treatment of infections due to penicillinase-producing staphylococci, it may be used to initiate therapy in such patients in whom a staphylococcal infection is suspected. (See Important Note below.)

Bacteriologic studies to determine the causative organisms and their sensitivity to cloxacillin sodium should be performed.

IMPORTANT NOTE

When it is judged necessary that treatment be initiated before definitive culture and sensitivity results are known, the choice of cloxacillin sodium should take into consideration the fact that it has been shown to be effective only in the treatment of infections caused by pneumococci, Group A beta-hemolytic streptococci, and penicillin G-resistant and penicillin G-sensitive staphylococci. If the bacteriology report later indicates the infection is due to an organism other than a penicillin G-resistant staphylococcus sensitive to cloxacillin sodium, the physician is advised to continue therapy with a drug other than cloxacillin sodium or any other penicillinase-resistant semi-synthetic penicillin.

Recent studies have reported that the percentage of staphylococcal isolates resistant to penicillin G outside the hospital is increasing, approximating the high percentage of resistant staphylococcal isolates found in the hospital. For this reason, it is recommended that a penicillinase-resistant penicillin be used as initial therapy for any suspected staphylococcal infection until culture and sensitivity results are known.

Cloxacillin sodium is a compound that acts through a mechanism similar to that of methicillin against penicillin G-resistant staphylococci. Strains of staphylococci resistant to methicillin have existed in nature and it is known that the number of these strains reported has been increasing. Such strains of staphylococci have been capable of producing serious disease, in some instances resulting in fatality. Because of this, there is concern that widespread use of the penicillinase-resistant penicillins may result in the appearance of an increasing number of staphylococcal strains which are resistant to these penicillins.

Methicillin-resistant strains are almost always resistant to all other penicillinase-resistant penicillins (cross-resistance with cephalosporin derivatives also occurs frequently). Resistance to any penicillinase-resistant penicillin should be interpreted as evidence of clinical resistance to all, in spite of the fact that minor variations in *in vitro* sensitivity may be encountered when more than one penicillinase-resistant penicillin is tested against the same strain of staphylococcus.

CONTRAINDICATIONS:

A history of a previous hypersensitivity reaction to any of the penicillins is a contraindication.

RESULTS OF ORAL THERAPY revealed a high percentage of treatment failures with penicillin V potassium, but *no* failures with Tegopen.

		Given Tegopen® *(cloxacillin sodium)*	Given *penicillin V-K*
Staphylococcus aureus	(78 patients)	39	39
Returned to clinic at one week		29†	38†
Treatment failure at one week		0	18 (47.4%)
Staphylococcus aureus and *Streptococcus pyogenes*	(9 patients)	4	5
Returned to clinic at one week		4	5
Treatment failure at one week		0	2 (40%)
No initial bacterial growth	(14 patients)	9	5
All 14 healed, regardless of which antibiotic was administered.			
Beta-hemolytic *Streptococcus*	(1 patient)	0	1
TOTALS:	**102 patients**	**52 patients**	**50 patients**

†Eleven patients did not return for their one-week checkup These were all called by telephone, and their families reported the lesions had healed One patient was dropped from the study, early, because of adverse reaction to medication.

STUDY: DESCRIPTION/PROTOCOL

- 102 nonselected subjects, with initial bacteriology as follows: 77% *Staphylococcus aureus,* 9% mixed *Staphylococcus aureus* and *Streptococcus pyogenes,* and 1% beta-hemolytic *Streptococcus.*‡
- All patients were given randomized therapy—Tegopen capsules or oral solution, or penicillin V-K tablets or oral solution, in recommended dosages according to body weight.
- All patients were evaluated after one week's therapy. If there was no improvement, therapy was switched to the other antibiotic. The "other antibiotic" proved to be Tegopen 100% of the time because no treatment failures had occurred with Tegopen.
- A final assessment of progress was made two weeks after initiation of Tegopen therapy.

‡The remainder, to equal 100%, consisted of 14 patients (13%) who exhibited no initial bacterial growth. These 14 were all healed, whether given Tegopen or penicillin V-K.

TEGOPEN®
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–effective therapy for staph infections of the skin and skin structures

WARNING:

Serious and occasionally fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin therapy. Although anaphylaxis is more frequent following parenteral therapy it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with a history of sensitivity to multiple allergens.

There have been well documented reports of individuals with a history of penicillin hypersensitivity reactions who have experienced severe hypersensitivity reactions when treated with a cephalosporin. Before therapy with a penicillin, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, and other allergens. If an allergic reaction occurs, the drug should be discontinued and the patient treated with the usual agents, e.g., pressor amines, antihistamines, and corticosteroids.

Safety for use in pregnancy has not been established.

PRECAUTIONS:

The possibility of the occurrence of superinfections with mycotic organisms or other pathogens should be kept in mind when using this compound, as with other antibiotics. If superinfection occurs during therapy, appropriate measures should be taken.

As with any potent drug, periodic assessment of organ system function, including renal, hepatic, and hematopoietic, should be made during long-term therapy.

ADVERSE REACTIONS:

Gastrointestinal disturbances, such as nausea, epigastric discomfort, flatulence, and loose stools, have been noted by some patients. Mildly elevated SGOT levels (less than 100 units) have been reported in a few patients for whom pretherapeutic determinations were not made. Skin rashes and allergic symptoms, including wheezing and sneezing, have occasionally been encountered. Eosinophilia, with or without overt allergic manifestations, has been noted in some patients during therapy.

USUAL DOSAGE:

Adults: 250 mg. q.6h.

Children: 50 mg./Kg./day in equally divided doses q.6h. Children weighing more than 20 Kg. should be given the adult dose. Administer on empty stomach for maximum absorption.

N.B.: INFECTIONS CAUSED BY GROUP A BETA-HEMOLYTIC STREPTOCOCCI SHOULD BE TREATED FOR AT LEAST 10 DAYS TO HELP PREVENT THE OCCURRENCE OF ACUTE RHEUMATIC FEVER OR ACUTE GLOMERULONEPHRITIS.

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10,000,000 alcoholics. Ethanol may produce many effects that together bring about nutritional deficiencies, so that alcoholism affects nutrition at many levels.[1]

25,500,000 geriatric patients. The older patient may have some disorder or socio-economic problem that can undermine good nutrition.[2]

23,500,000 surgical patients. Nutritional status can be compromised by the trauma of surgery; and some operations interfere with the ingestion, digestion and absorption of food.[3]

Before prescribing, please consult complete product information, a summary of which follows:
Each Berocca® Plus tablet contains 5000 IU vitamin A (as vitamin A acetate), 30 IU vitamin E (as *dl*-alpha tocopheryl acetate), 500 mg vitamin C (ascorbic acid), 20 mg vitamin B_1 (as thiamine mononitrate), 20 mg vitamin B_2 (riboflavin), 100 mg niacin (as niacinamide), 25 mg vitamin B_6 (as pyridoxine HCl), 0.15 mg biotin, 25 mg pantothenic acid (as calcium pantothenate), 0.8 mg folic acid, 50 mcg vitamin B_{12} (cyanocobalamin), 27 mg iron (as ferrous fumarate), 0.1 mg chromium (as chromium nitrate), 50 mg magnesium (as magnesium oxide), 5 mg manganese (as manganese dioxide), 3 mg copper (as cupric oxide), 22.5 mg zinc (as zinc oxide).

Indications: Prophylactic or therapeutic nutritional supplementation in physiologically stressful conditions, including conditions causing depletion, or reduced absorption or bioavailability of essential vitamins and minerals; certain conditions resulting from severe B-vitamin or ascorbic acid deficiency; or conditions resulting in increased needs for essential vitamins and minerals.
Contraindications: Hypersensitivity to any component.
Warnings: Not for pernicious anemia or other megaloblastic anemias where vitamin B_{12} is deficient. Neurologic involvement may develop or progress, despite temporary remission of anemia, in patients with vitamin B_{12} deficiency who receive supplemental folic acid and who are inadequately treated with B_{12}.
Precautions: *General:* Certain conditions may require additional nutritional supplementation. During pregnancy, supplementation with vitamin D and calcium may be required. Not intended for treatment of severe specific deficiencies. *Information for the Patient:* Toxic reactions have been reported with injudicious use of certain vitamins and minerals. Urge patients to follow specific dosage instructions. Keep out of reach of children. *Drug and Treatment Interactions:* As little as 5 mg pyridoxine daily can decrease the efficacy of levodopa in the treatment of parkinsonism. Not recommended for patients undergoing such therapy.
Adverse Reactions: Adverse reactions have been reported with specific vitamins and

5,000,000 hospital patients with infections.[4] Many are anorectic and may have a markedly reduced food intake. Supplements are often provided as a prudent measure because the vitamin status of critically ill patients cannot be readily determined.[3]

The incalculable millions on calorie-reduced diets. Patients ingesting 1000 or fewer calories per day could be at high risk because this intake may not supply most nutrients in adequate amounts without supplementation.[5]

Berocca Plus

A balanced formula for prophylactic or therapeutic nutritional supplementation.

Berocca Plus Tablets provide: therapeutic levels of ascorbic acid and B-complex vitamins; supplemental levels of biotin, vitamins A and E, and five important minerals (iron, chromium, manganese, copper and zinc); plus magnesium. Berocca Plus is not intended for the treatment of specific vitamin and/or mineral deficiencies.

Berocca Plus, highly acceptable to patients, has virtually no odor or aftertaste and is economical. And its "Rx only" status means more physician involvement, better patient compliance.

References: 1. Shaw S, Lieber CS: Nutrition and alcoholism, chap. 40, in *Modern Nutrition in Health and Disease*, edited by Goodhart RS, Shils ME. Philadelphia, Lea & Febiger, 1980, pp. 1220, 1237. 2. Watkin DM: Nutrition for the aging and the aged, chap. 28, in *Modern Nutrition in Health and Disease, op. cit.*, p. 781. 3. Shils ME, Randall HT: Diet and nutrition in the care of the surgical patient, chap. 36, in *Modern Nutrition in Health and Disease, op. cit.*, pp. 1084, 1089, 1114. 4. Dixon RE: *Ann Intern Med 89* (Part 2): 749-753, Nov 1978. 5. Committee on Dietary Allowances, National Research Council: Recommended Dietary Allowances, ed 9. Washington, National Academy of Sciences, 1980, p. 13.

minerals, but generally at levels substantially higher than those in Berocca Plus. However, allergic and idiosyncratic reactions are possible at lower levels. Iron, even at the usual recommended levels, has been associated with gastrointestinal intolerance in some patients.

Dosage and Administration: Usual adult dosage: one tablet daily. Not recommended for children. Available on prescription only.

How Supplied: Golden yellow, capsule-shaped tablets—bottles of 100.

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Cyclapen®-W (cyclacillin) produces twice the peak serum concentration* (15.6 mcg/ml versus 7.3 mcg/ml) in half the time (30 minutes versus 60 minutes).[1]

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(cyclacillin) Tablets/Suspension

Rapid onset of action with fewer side effects.

*Rapidly excreted unchanged in urine. Clinical efficacy may not always correlate with blood levels.
†Due to susceptible organisms.

1. Ginsburg CM, McCracken GH Jr, Zweighaft TC, Clahsen JC: Comparative pharmacokinetics of cyclacillin and amoxicillin in infants and children. *Antimicrob Ag Chemother* 19:1086-1088 (June) 1981.
2. Multicenter trials. Data to be published.

See important information on page after next.

Compared to ampicillin

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Cyclapen®-W (cyclacillin) produces peak serum concentrations* almost four times higher and over one hour earlier.[3]

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CYCLAPEN®-W

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Rapid onset of action with fewer side effects.

*Rapidly excreted unchanged in urine. Clinical efficacy may not always correlate with blood levels.
†Due to susceptible organisms.
3. Data on file. Wyeth Laboratories.
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See important information on adjoining page.

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Cyclapen®-W (cyclacillin)

Indications
Cyclacillin has less in vitro activity than other drugs in the ampicillin class and its use should be confined to these indications: Treatment of the following infections:

RESPIRATORY TRACT
- Tonsillitis and pharyngitis caused by Group A beta-hemolytic streptococci
- Bronchitis and pneumonia caused by S. pneumoniae (formerly D. pneumoniae)
- Otitis media caused by S. pneumoniae (formerly D. pneumoniae) and H. influenzae
- Acute exacerbation of chronic bronchitis caused by H. influenzae*
- *Though clinical improvement has been shown, bacteriologic cures cannot be expected in all patients with chronic respiratory disease due to H. influenzae.

SKIN AND SKIN STRUCTURES (integumentary) infections caused by Group A beta-hemolytic streptococci and staphylococci, non-penicillinase producers.

URINARY TRACT INFECTIONS caused by *E. coli* and *P. mirabilis*. (This drug should not be used in any *E. coli* and *P. mirabilis* infections other than urinary tract.)

NOTE: Perform cultures and susceptibility tests initially and during treatment to monitor effectiveness of therapy and susceptibility of bacteria. Therapy may be instituted prior to results of sensitivity testing.

Contraindications Contraindicated in individuals with history of an allergic reaction to penicillins.

Warnings Cyclacillin should only be prescribed for the indications listed herein.

Cyclacillin has less in *vitro* activity than other drugs of the ampicillin class. However, clinical trials demonstrated it is efficacious for recommended indications.

Serious and occasional fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin. Although anaphylaxis is more frequent following parenteral use, it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with history of sensitivity to multiple allergens. There are reports of patients with history of penicillin hypersensitivity reactions who experienced severe hypersensitivity reactions when treated with a cephalosporin. Before penicillin therapy, carefully inquire about previous hypersensitivity reactions to penicillins, cephalosporins and other allergens. If allergic reaction occurs, discontinue drug and initiate appropriate therapy. Serious anaphylactoid reactions require immediate emergency treatment with epinephrine. Oxygen, I.V. steroids, airway management, including intubation, should also be administered as indicated.

Precautions Prolonged use of antibiotics may promote overgrowth of nonsusceptible organisms. If superinfection occurs, take appropriate measures.

PREGNANCY: Pregnancy Category B. Reproduction studies performed in mice and rats at doses up to 10 times the human dose revealed no evidence of impaired fertility or harm to the fetus due to cyclacillin. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, use this drug during pregnancy only if clearly needed.

NURSING MOTHERS: It is not known whether this drug is excreted in human milk. Because many drugs are, exercise caution when cyclacillin is given to a nursing woman.

Adverse Reactions Oral cyclacillin is generally well tolerated. As with other penicillins, untoward sensitivity reactions are likely, particularly in those who previously demonstrated penicillin hypersensitivity or with history of allergy, asthma, hay fever, or urticaria. Adverse reactions reported with cyclacillin: diarrhea (in approximately 1 out of 20 patients treated), nausea and vomiting (in approximately 1 in 50), and skin rash (in approximately 1 in 60). Isolated instances of headache, dizziness, abdominal pain, vaginitis, and urticaria have been reported. (See WARNINGS) Other less frequent adverse reactions which may occur and are reported with other penicillins are anemia, thrombocytopenia, thrombocytopenic purpura, leukopenia, neutropenia and eosinophilia. These reactions are usually reversible on discontinuation of therapy.

As with other semisynthetic penicillins, SGOT elevations have been reported.

As with antibiotic therapy generally, continue treatment at least 48 to 72 hours after patient becomes asymptomatic or until bacterial eradication is evidenced. In Group A beta-hemolytic streptococcal infections, at least 10 days' treatment is recommended to guard against risk of rheumatic fever or glomerulonephritis. In chronic urinary tract infection, frequent bacteriologic and clinical appraisal is necessary during therapy and possibly for several months after. Persistent infection may require treatment for several weeks.

Cyclacillin is not indicated in children under 2 months of age.

Patients with Renal Failure Cyclacillin may be safely administered to patients with reduced renal function. Due to prolonged serum half-life, patients with various degrees of renal impairment may require change in dosage level (see DOSAGE AND ADMINISTRATION in package insert).

Dosage (Give in equally spaced doses)

INFECTION	ADULTS	CHILDREN*
Respiratory Tract		
Tonsillitis & Pharyngitis	250 mg q.i.d.	body weight < 20 kg (44 lbs) 125 mg q.i.d. body weight > 20 kg (44 lbs) 250 mg q.i.d.
Bronchitis and Pneumonia		
Mild or Moderate Infections	250 mg q.i.d.	50 mg/kg/day q.i.d.
Chronic Infections	500 mg q.i.d.	100 mg/kg/day q.i.d.
Otitis Media	250 mg to 500 mg q.i.d.†	50 to 100 mg/kg/day†
Skin & Skin Structures	250 mg to 500 mg q.i.d.†	50 to 100 mg/kg/day†
Urinary Tract	500 mg q.i.d.	100 mg/kg/day

*Dosage should not result in a dose higher than that for adults.
†depending on severity

How Supplied Tablets 250 mg and 500 mg in bottles of 100. Oral Suspension 125 mg and 250 mg per 5 ml in bottles to make 100 ml and 200 ml of Suspension.

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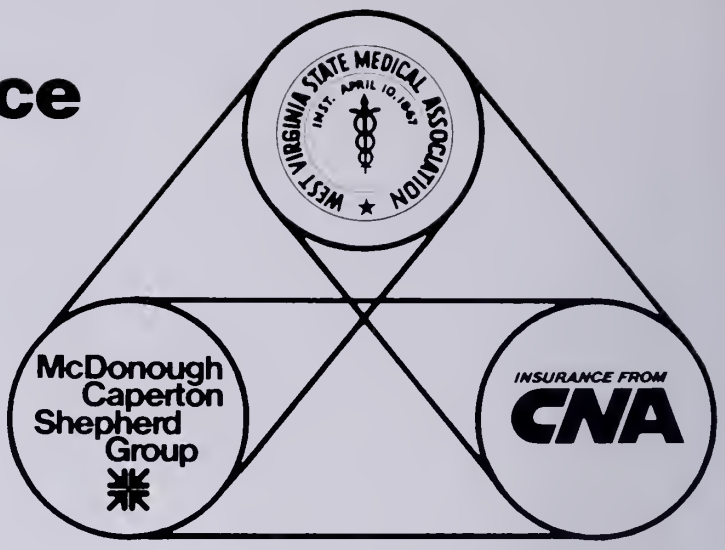

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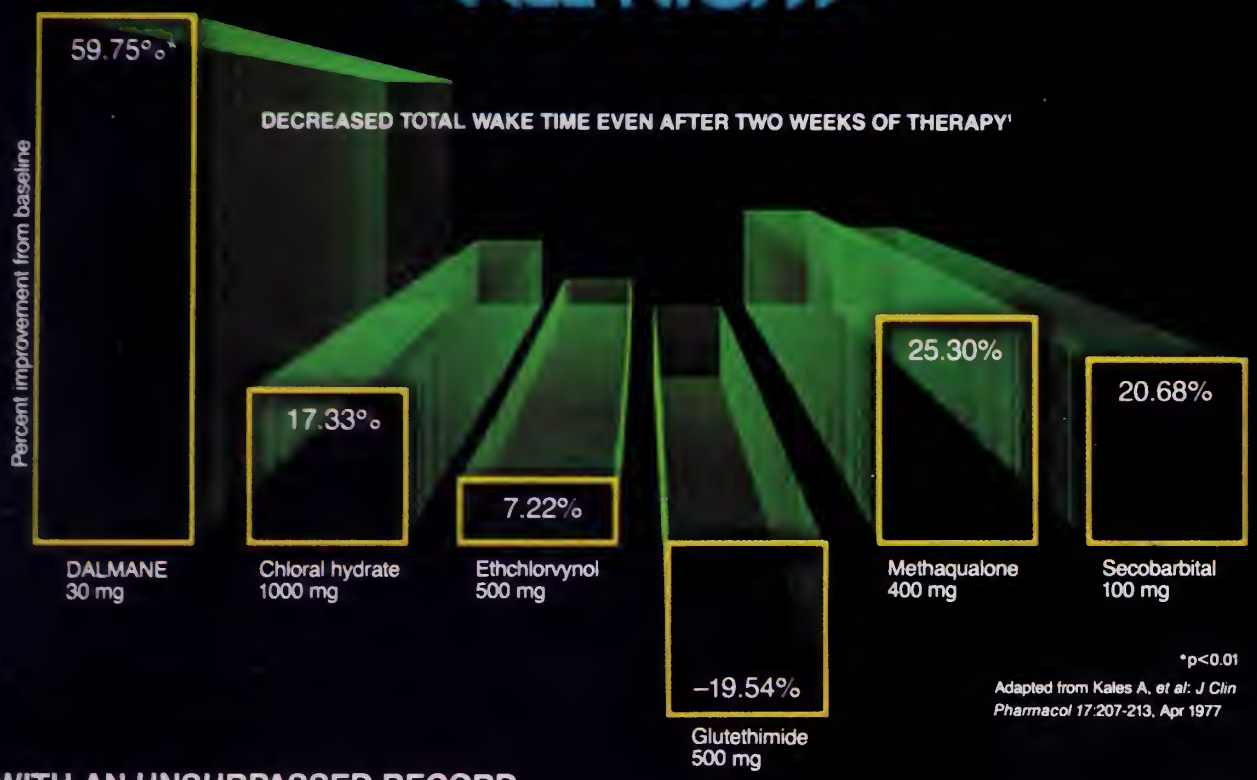

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Adapted from Kales A, *et al: J Clin Pharmacol* 17:207-213, Apr 1977

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The efficacy of Dalmane (flurazepam HCl/Roche) has been documented in 185 studies involving 9141 patients suffering from one or more of the three major forms of insomnia–difficulty falling asleep, staying asleep and sleeping long enough.[2]

Relative safety was demonstrated in a large study of 2542 hospitalized medical patients. Only 3.1% of these patients reported adverse reactions–predominantly unwanted residual drowsiness. None of the reactions were considered serious by attending physicians.[3]

FOR SLEEP WITHIN 17 MINUTES[2] AND NO WORSENING OF SLEEP ON DISCONTINUATION

Rapid sleep induction, within 17 minutes on average, sets the stage for insomnia relief. And, after discontinuation of Dalmane for periods ranging up to 14 nights, no worsening of sleep compared with baseline was observed.[4]

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Consider other medications the patient may be taking (including alcoholic beverages) and be aware of possible drug interactions. Please note that patients should be treated for underlying physical or psychological factors before therapy with a sleep medication is undertaken.

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flurazepam HCl/Roche

THE STANDARD OF HYPNOTIC EFFICACY FROM THE LEADER IN SLEEP RESEARCH

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SLEEP-SPECIFIC
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One 15-mg capsule *h.s.*–recommended initial dosage for elderly or debilitated patients.
One 30-mg capsule *h.s.*–usual adult dosage
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- Well tolerated[2]
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- Compatible with chronic warfarin therapy; no unacceptable fluctuation in prothrombin time reported[7,8]

UNLIKE NONSPECIFIC MEDICATIONS USED FOR SLEEP

Tricyclic antidepressants

–which are *not* sleep specific,[9] yet are sometimes used in nondepressed patients for sleep

–which can cause transient insomnia in the elderly[10]

–which can require careful monitoring in cardiovascular patients[10]

–which have strong anticholinergic effects[10]

Antihistamines

–which are *not* reliable sleep-inducing agents[11]

–which may produce stimulation instead[11]

–which have anticholinergic effects[11]

Major tranquilizers

–whose side effects may be troublesome for nonpsychotic patients[12]

–where tolerance for sedation appears rapidly[12]

Dalmane does not cause significant worsening of sleep beyond baseline levels upon discontinuation.[4]

References. **1.** Kales A. *et al. J Clin Pharmacol 17* 207-213. Apr 1977 **2.** Data on file. Medical Department, Hoffmann-La Roche Inc., Nutley NJ **3.** Greenblatt DJ, Allen MD, Shader RI. *Clin Pharmacol Ther 21* 355-361. Mar 1977 **4.** Kales A, *et al. Clin Pharmacol Ther 18* 356-363. Sep 1975 **5.** Moore JD, Weissman L. *J Clin Pharmacol 16* 241-244. May-Jun 1976 **6.** Spiegel HE. Data on file. Medical Department, Hoffmann-La Roche Inc., Nutley NJ **7.** Robinson DS, Amidon EL. Interaction of benzodiazepines with warfarin in man, in *The Benzodiazepines*, edited by Garattini S, Mussini E, Randall LO. New York. Raven Press, 1973, pp 641-646 **8.** Warfarin Study. Data on file. Medical Department, Hoffmann-La Roche Inc., Nutley NJ **9.** Baldessarini RJ. Drugs and the treatment of psychiatric disorders, chap 19, in Goodman and Gilman's *The Pharmacological Basis of Therapeutics*, ed 6. New York, Macmillan Publishing Co. Inc. 1980, pp 391-447 **10.** Cole JO, Davis JM. Antidepressant drugs, chap 31.2, in *Comprehensive Textbook of Psychiatry II*, edited by Freedman AM, Kaplan HI, Sadock BJ, ed 2. Baltimore. The Williams & Wilkins Company, vol 2, 1976, pp 1941-1956 **11.** Douglas WW. Histamine and 5-hydroxytryptamine (serotonin) and their antagonists, chap 26, in Goodman and Gilman's *The Pharmacological Basis of Therapeutics*, ed 6. New York, Macmillan Publishing Co. Inc. 1980, pp 609-646 **12.** Davis JM, Cole JO. Antipsychotic drugs, chap 31.1, in *Comprehensive Textbook of Psychiatry II*, edited by Freedman AM, Kaplan HI, Sadock BJ, ed 2. Baltimore. The Williams & Wilkins Company, vol 2, 1976, pp 1921-1940

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended. Repeated therapy should only be undertaken with appropriate patient evaluation.

Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase, and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect.
Adults: 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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Multiple Primary Malignancies At Ohio Valley Medical Center

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Between 1960 and 1980, 150 patients were found to have two or more primary malignant tumors, excluding non-melanoma skin cancers, at Ohio Valley Medical Center, Inc., Wheeling, West Virginia. Some presented synchronously, and others, metachronously. Analysis of this group of patients is done with reference to age, sex, prognosis and survival.

Multiple primary malignancies and their management certainly are a challenge to physicians taking care of these patients. The incidence ranges from one to 11 per cent of all cancers.[1] There have been international conferences on multiple primary cancers in Perugia, Italy (1973) and New York City (1976). In many publications attempts have been made to answer several questions: Is a patient cancer prone? Is prognosis altered by having more than one cancer? What are the etiologic factors that cause more than one cancer in the same patient? The answers were far from satisfactory.

An attempt is made here to analyze the multiple primary cancer cases at Ohio Valley Medical Center, Inc. (OVMC), in Wheeling, West Virginia, with the purpose of alerting the physician that the problem does exist and that it deserves special attention and appropriate therapeutic measures.

Materials and Methods

One hundred and fifty cancer patients treated at OVMC from 1960 to 1980 were found to have multiple primary malignancies. The true incidence at this institution is rather difficult to estimate because the records of cancer cases in the earlier years were not accurate. Among these were seven cases with three separate primary malignancies.

Ages ranged from 22 to 94 years with a median of 64 years. There were 64 males and 86 females. Sixty-one patients are still alive and 89 dead at the time of this report. Eight died of causes unrelated to the cancers. Forty-three presented with two separate primaries, and 107 developed a second cancer subsequently.

It is interesting to note that the interval between the first and second cancer was as long as 15 years with a median of three years and a range of eight months to 15 years. Patients who were found to have a second cancer within six months after the first were counted as a synchronous presentation.

Survival

Survival ranged from one month to 16 years after the second cancer was diagnosed. The median duration of survival of deceased patients was one year. Sixty-one patients are still alive with a duration range of one to 16 years and a median of three years. A total of 21 patients survived (some are alive still) for five or more years.

Table 1 indicates the 10 most common sites of cancer that developed a second primary. Breast cancer, colo-rectal cancer and lung cancer lead the list.

Twenty-one breast carcinoma patients (Table 2) developed a second breast cancer, and two of these presented simultaneously. The interval before the development of second cancer ranged from 10 months to eight years. Survival after

the diagnosis of the second cancer ranged from seven months to 16 years.

As the table indicates, there does not seem to be any correlation between the length of interval before the development of second cancer and the subsequent length of survival in these patients. Fifteen of 21 patients are alive at the time of this report with a range of one to 16 years.

TABLE 1

10 Most Common Initial Primary Sites with Second Primary

Second Primary Sites / *Initial Primary Site*	*Breast*	*Colo/Rec.*	*Lung*	*H&N*	*Pros.*	*Blad.*	*Endo.*	*Other**	*Total*
Breast	21	7	0	0	–	0	9	9	46
Colo/Rec	1	3	2	1	7	1	1	11	27
Lung	0	3	2	2	5	2	1	3	18
H&N	0	1	6	4	2	0	0	1	14
Prostate	–	1	1	1	–	5	–	3	11
Bladder	0	0	6	1	0	–	0	0	7
Endometrium	1	1	2	0	–	0	–	2	6
Ovary	2	1	0	0	–	1	1	0	5
Cervix	1	0	2	1	–	0	0	1	5
Lymphoma	1	0	2	0	0	1	0	0	4

*Includes cancers of pancreas, kidney, malignant melanoma, parotid, pleura, esophagus, fallopian tube, vulva, anus, ureter and sarcoma.

TABLE 2

Cases of Bilateral Breast Cancer

No.	*Patient Initial*	*Age*	*Interval**	*Survival #*	*Status*
1.	M. C.	48	4	8-9	L
2.	M. F.	70	10 mo.	2-2	L
3.	A. F.	44	8	1	D
4.	M. G.	43	3	16	L
5.	E. H.	87	1	4-2	L
6.	H. H.	65	3	4-3	L
7.	M. K.	43	3	8 mo.	D
8.	J. K.	65	3	3	D
9.	A. M.	64	5	1-9	L
10.	M. S.	80	1	7 mo.	L
11.	H. S.	63	3	1-5	D
12.	M. S.	70	4	4	L
13.	M. S.	54	5	2-8	L
14.	S. W.	68	1	1	D
15.	T. M.	25	7	1	L
16.	C. L.	67	3	1	L
17.	E. H.	59	6	1	L
18.	A. D.	61	S	8-8	L
19.	G. W.	54	7	1	D
20.	M. B.	62	2	8-6	L
21.	A. R.	55	S	7-6	L

*Time in years and months before development of second breast cancer. # survival after second breast cancer is diagnosed. S=Simultaneous, L=Living, D=Dead.

Seven patients with three separate primaries are listed in Table 3. The length of survival in this group varies from one month to seven years after the third cancer was diagnosed. One patient is living and the other six died of cancer.

Discussion

Multiple primary malignancies (excluding non-melanoma skin cancers) seem to be more common than once believed.[1,2] The incidence ranges from one to 11 per cent of all cancers.

Patients with breast carcinoma, colo-rectal carcinoma and lung carcinoma have a tendency to have more second primary cancers than others. Breast cancer patients are more likely to develop a second primary in the opposite breast, suggesting the possibility of common etiologic factors.[3,4] The most common secondary site of cancer in male patients with an initial colo-rectal cancer is the prostate. Head and neck cancer patients are more likely to develop a second primary in the head and neck region or the lung than anywhere else. No conclusions can be drawn from this review as to the etiology of a second cancer. A higher incidence of bilateral breast cancer, combination of breast cancer and endometrial cancer in the same patient and multiple cancers in the head and neck region and lung do suggest a common etiology. On the other hand, a combination of cancer of parotid

TABLE 3

Patients with Three Separate Primary Malignancies

No.	*Patient Initials*	*Age Sex*	*Site*	*Survival 1*	*Survival 2*
1.	A. N.	42 F	Breast Endometrium Rectum	7-10	1-5
2.	F. P.	66 M	Lung Colon Prostate	11	7-5
3.	F. S.	75 M	Rectum Prostate Esophagus	.8	1 mo.
4.	G. W.	54 F	Breast Vulva Breast	5-4	2 mo.
5.	J. W.	82 M	Bladder Lung Vocal cord	1-6	10 mo.
6.	J. W.	66 F	Ovary Rectum Breast	9-5	1
7.	R. F.	70 M	Tongue Rectum Lung	4	1-5

1=survival in years and months after the diagnosis of first cancer.

2=survival in years and months after the diagnosis of third cancer.

gland and rectal cancer, or kidney cancer and rectal cancer, or esophageal and breast cancer do not suggest any obvious kinship in etiology.

Length of survival may not depend on the number of primary cancers but on the type and stage of the cancer. For example, prognosis in a patient with early vocal cord cancer and advanced lung cancer would depend on the latter rather than on the presence of two primaries; or a patient with early breast cancer and early endometrial cancer may not have any worse prognosis than a patient with one of these cancers in the early stage. There were five cases of multiple cancers from 1960 to 1965. We have already seen five cases of multiple cancers in the first two months of 1981. This may be accounted for by faulty record keeping in the earlier years. It also might suggest the possibility of an increasing incidence of multiple malignancies in patients surviving longer with successful treatment of their first cancer. No conclusion can be reached on the basis of this small series.

Finally, as Caldwell mentioned in his article,[5] many possible factors play an important role in the development of second or multiple malignancies. These include age, length of survival following successful treatment of first cancer, type of treatment of first cancer (chemotherapy, radiation therapy etc.), heredity (family history), site and type of primary neoplasm, and other carcinogens or cocarcinogens in the environment. To this list might be added variability in host defenses to malignant disease.

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The greatest glory of a freeborn people is to transmit that freedom to their children.

—William Harvard

Special Article

West Virginia Medical Doctor Supply During The 1980s: An Assessment Using GMENAC Requirements Standards

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Increasing state responsibilities for medical education and physician manpower policies make it imperative that future physician needs are carefully examined. This paper presents a comparison of 1990 physician requirement estimates derived from the Graduate Medical Education National Advisory Committee (GMENAC) and physician resource projections prepared by the Office of Health Services Research at West Virginia University. The GMENAC procedure is briefly described and then, through specialty-specific physician-to-population ratios, contrasted with other requirements ratio studies.

Application of the GMENAC standards to West Virginia shows the state with shortages in nine of 16 specialties studied. Seven other specialties are expected to be in balance in 1990 while surpluses are expected in no specialties.

Problems associated with policy decisions which fail to consider differences in the national and state-level situations are discussed.

Finally, the authors recommend that a state-level, GMENAC-type planning effort be undertaken in West Virginia.

After 13 years of increasing federal involvement in medical and graduate medical education, a withdrawal of support by the federal government and increase in responsibility of state and local governments have occurred. From the initial Health Professions Educational Assistance Act of 1963 (PL 83-222) until the Health Professions Educational Assistance Act of 1976 (PL 94-484), the federal government continually increased its level of financial support while also increasing controls at the policy level. The 1976 legislation formally shifted federal policy away from the intensive development efforts of the 1960s and 1970s. With the redirection of federal policy, state involvement in the financing and planning for medical and graduate medical education is critical.

The effective formulation of manpower policy at the state level requires in-depth knowledge of the physician resources available in the state and the care requirements of its citizens. Examination of current physician resources relative to specialty, size, and geographic distribution, and projection of those resources to some future target date are essential to manpower program development. While an in-depth knowledge of manpower resources is imperative, comparison with accepted "requirements" statistics provides the measurement tool to assess shortages or excesses and to guide policy initiatives.

Estimating manpower requirements attempts to determine whether the current or future manpower resources are adequate to provide services for the population in question. How much service the population will need or demand becomes a key question. The concept of need carries with it the idea of an ideal health system. That is, based upon the demographic, socio-economic, and epidemiological character of a population, what level of service is needed to maintain a given health status? Demand, on the other hand, carries with it a perception of practicality with regard to the health care system. That is, what level of service will a given population be willing and able to purchase? The "requirements" derived from these two approaches could be very different.

Other considerations in establishing requirements should be: changes in the health delivery system; changes in morbidity or mortality patterns; changes in economic conditions, and the premise that, as the time frame for a projection of requirements extends into the future, so does the variance of the factors to be considered.

In addition to the conceptual problems of examining current and future requirements, there are a series of technical problems as well. The quantification of changes in medical technology, productivity patterns of physicians, quality standards, and changes in delivery patterns, all represent potential sources of error. There are, then, various means of establishing requirements

and, depending upon the methods and factors considered, the results can differ significantly.

A recent study conducted in the Office of Health Services Research of the West Virginia University Department of Community Medicine examined the question of resources and provided analysis and projections as an initial step in formulating a plan for medical and graduate medical education in West Virginia. The next step in such a planning process calls for the assessment of the supply relative to requirements for physician services in West Virginia currently and in the future. In so doing, this study will rely heavily on the work of the Graduate Medical Education National Advisory Committee (GMENAC) for the requirements data, and on the Office of Health Services Research (OHSR) for the resource information.

GMENAC Report

Recently, GMENAC completed a projection of manpower resources and requirements for the nation. Beginning in 1976 as a joint effort between the federal government and the medical profession, the Committee identified six major manpower problems. The problems were characterized by GMENAC as "too many, imbalances, unevenness, unknown, uncertain, and complex. There will be TOO MANY physicians in 1990. There will be substantial IMBALANCES in some specialties. There will continue to be a marked UNEVENNESS in the geographic distribution of physicians. The country may be training TOO MANY nonphysician providers for 1990. The factors influencing specialty choice are COMPLEX. The actual total cost of graduate medical education is UNKNOWN. Economic motivation in specialty and geographic choice is UNCERTAIN."[1]

GMENAC addressed these problems through five technical advisory panels covering physician supply and requirements modeling, non-physician providers, geography, education, and finance. The modeling panel's projection of future resources and requirements produced three major proposals to resolve the projected oversupply of some 70,000 physicians by 1990 and a serious specialty imbalance: (1) decrease the number of medical graduates; (2) restrict entry of foreign medical graduates into the United States; and (3) change the mix of residency positions. The other four technical panels then developed strategies to achieve the solutions proposed by the modeling group.

The panels developed a total of some 100 specific recommendations condensed into 40 major recommendations that provide solutions to the main GMENAC objective: "to correct the oversupply of physicians, the surpluses or shortages within individual specialties, and the uneven geographic distribution of physicians."[2]

Three major GMENAC recommendations important to this study are:

(1) All allopathic and osteopathic medical schools should reduce entering class size in the aggregate by a minimum of 10 per cent relative to the 1978 enrollment by 1984.

(2) The number of graduates of foreign medical schools entering the United States should be severely restricted.

(3) To correct shortages or surpluses in a manner not disruptive to the graduate medical education system, no specialty or subspecialty should be expected to increase or decrease the number of first-year trainees in residency or fellowship training programs more than 20 per cent by 1986, compared to 1979.[3]

In addition to these recommendations, two areas of the GMENAC study are critically important to this paper: (1) estimating procedures and results of specialty-specific physician requirements; and (2) estimating procedures of specialty-specific physician supply.

Models for Physician Supply, Requirements

To estimate future supply, GMENAC directed its efforts at creating a model of physician supply which was accurate at the individual specialty level and which accounted for the crucial link between residency training and ultimate specialty practice.

The GMENAC requirements model, an adjusted, needs-based model, is more complex. It has many aspects of a needs-based approach (for example: expert physician panels, norms of care, demographic-related factors for discerning incidence and prevalence of disease, service productivity), but tempers its estimates with expectations of the financing system, geographic distribution of resources, and other factors bearing on utilization.

To establish requirements, the GMENAC process begins with an estimate of "the total service requirements of the population based on surveys of disease and disability rates. Preventive service requirements are added to this total. This starting point is chosen so that estimates will be sensitive to the problems of the disadvantaged, the underserved, and other persons not receiving health service benefits. The second step is to estimate the proportion of persons with each disease or disability (or for whom preventive

services are to be planned) who are likely to utilize the services given the expected financing system, geographic distribution, cultural attributes, and consumer educational efforts."[4]

The unique aspect of the GMENAC procedure was its treatment of all specialties simultaneously. Separate Delphi panels for each specialty reported their estimates to the modeling panel. The Committee could then make critical recommendations for improving specialty distribution.

Two Assumptions

Two particular assumptions in the supply and requirement models need to be examined. First, the requirements model is a normative model and, therefore, states what manpower should be, not necessarily what manpower is or will be available now or in the future. Secondly, regarding both the supply and requirements models, GMENAC assumed that for the pediatric, internal medicine and surgery specialties the physicians' practices will become more oriented toward their specific specialties than they are now. Because each will meet more of the specialty's service requirements, the number of physicians needed to provide a given level of care will be reduced. This assumption could lead to underestimated actual need for such specialists. Moreover, assuming a shift of general practice care given by these specialists to primary care physicians overestimates the actual needs for primary care practitioners.

These assumptions are important to understanding GMENAC and applying the GMENAC standards to a specific state. The normative aspects are particularly important because they were developed on a national level and might not be relevant to a particular state.

The Committee anticipates surpluses of some 70,000 physicians by the year 1990, and more than 130,000 by 2000. The specialty distribution problems for 1990 are summarized in Table 1.

GMENAC considered other problems as well. The continued development of non-physician providers in the face of a surplus of doctors presents difficult public policy considerations. Geographic maldistribution of physicians, along with the theoretical aspects of defining shortages and shortage areas, needs additional study. Placing responsibility for students' specialty choices on medical schools is inappropriate, and mechanisms to influence such choices are important. Determining the cost of graduate medical education is very difficult, and the true costs of graduate medical education are unknown. Finally, the influence of financial factors on specialty and geographic choice is uncertain.

Current, Future Supplies in West Virginia

The OHSR recently completed a set of projections of the West Virginia physician population, by specialty, for 1990 (Table 2). The method used by OHSR was a basic stocks and flows model considering in- and out-migration and entrance into the physician stock through residency training.

Although OHSR and GMENAC employed similar resource projection models—both start with current physician supply, add in-migrants and entrants from graduate medical education, and subtract out-migration and those leaving practice because of death, disability or retirement—the GMENAC estimation process is more sophisticated and exact.

The OHSR physician supply study provides necessary information which can be used in conjunction with service requirements data to assess

TABLE 1

Shortages or Surpluses Will Be Present in Some Specialties in 1990.

Shortages for 1990
General Psychiatry
Child Psychiatry
Emergency Medicine
°Nuclear Medicine
Preventive Medicine
°Anesthesiology
°Physical Medicine and Rehabilitation
Hematology/Oncology (Internal Medicine)
Surpluses for 1990
General Surgery
Obstetrics/Gynecology
°Radiology
Cardiology (Internal Medicine)
Orthopedic Surgery
Ophthalmology
°°General Pediatrics
General/Family Medicine
General Internal Medicine
°Pathology
Pulmonary (Internal Medicine)
°Neurology
Neurosurgery
Nephrology (Internal Medicine)
Endocrinology (Internal Medicine)
Urology
Rheumatology (Internal Medicine)
Plastic Surgery
Infectious Disease (Internal Medicine)
Allergy/Immunology (Internal Medicine)
Thoracic Surgery
Near Balance (Supply=Requirements) for 1990
Dermatology
Gastroenterology
Otolaryngology

°The requirements in these six specialties were estimated crudely after a review of the literature. They should be considered as very rough approximations, and tentative. The full GMENAC modeling methodology will be applied to them in 1982.

°°All of the pediatric subspecialties are included with general pediatrics for the purpose of this display.

TABLE 2

Actual (1980) and Projected (1985, 1990) Number, Percentage Distribution, and Percentage Change of Active Permanently Licensed Medical Doctors in West Virginia, By Specialty

Specialty	*1980 Actual*		*1985 Projected*		*1990 Projected*		*Percentage Change*	*Percentage Change*
	Number	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*	*1980-1985*	*1980-1990*
Anesthesiology	65	2.9	77	3.1	86	3.1	18.5	32.3
Dermatology	22	1.0	19	.8	20	.7	−13.6	− 9.0
General/Family Practice	427	19.0	449	18.3	530	19.1	6.2	24.1
General Surgery	227	10.1	217	8.9	207	7.5	− 4.4	− 8.8
Internal Medicine	329	14.7	374	15.2	430	15.5	13.7	30.7
Neurosurgery	18	.8	22	.9	24	.9	22.2	33.3
Neurology	24	1.1	29	1.2	36	1.3	20.8	50.0
Obstetrics/Gynecology	139	6.2	151	6.2	168	6.1	8.6	20.9
Ophthalmology	71	3.2	74	3.0	83	3.0	4.2	16.9
Orthopedic Surgery	77	3.4	68	2.8	59	2.1	−11.7	−23.4
Otolaryngology	46	2.0	57	2.3	68	2.5	23.9	47.8
Pathology	99	4.4	119	4.9	138	5.0	20.2	39.3
Pediatrics	133	5.9	141	5.8	153	5.5	6.0	15.0
Psychiatry	86	3.8	115	4.7	158	5.7	33.3	83.7
Radiology	112	5.0	114	4.7	115	4.2	1.8	2.7
Urology	59	2.6	63	2.6	70	2.5	6.8	18.6
Other	311	13.9	359	14.7	424	15.3	15.4	36.3
Total	2245	100.0	2448	100.1	2770	100.0	9.0	23.4

the adequacy of the state's physician supply. This paper examines the GMENAC specialty-specific ratio standards relative to other requirements standards and then applies the GMENAC figures to West Virginia.

Methods:

Among the most straightforward ways to apply GMENAC or other standards to West Virginia is the population-to-health manpower ratio. This approach requires only two pieces of information: the population of the state and specialty-specific population-to-physician ratios reflecting the standard. Dividing the current or projected population by the ratio standards yields the number of physicians required. This result can then be compared with the current stock of manpower or projections of that supply.

Official population estimates for West Virginia by the Population Projection Task Force of the Governor's Office of Economic and Community Development (GOECD) are 1,878,000 in 1980 and 2,047,000 in 1990.[7] U.S. Census Bureau preliminary figures for 1980, however, show the state's population to be approximately 1,931,000. Using the Census Bureau's figure for 1980, reaching a population of 2,047,000 by 1990 requires only six-per cent growth. Although that rate of growth seems low, this study assumes the GOECD population estimate of 2.047 million persons in 1990.

Numerous Studies

Review of the literature yields numerous studies of standards for each of the 16 major specialties examined in the OHSR study.[9] While all the resulting standards were expressed as population-to-physician ratios, many of the studies used very detailed and sophisticated methods to determine the manpower requirements, and subsequently converted these requirements into population-to-physician ratios (standards).

Similarly, the GMENAC-adjusted, need-based requirements can be converted into requirement ratios by dividing the projected 1990 U.S. population (GMENAC used 245.5 million) by the number of physicians required for each specialty. The resulting quotients are the population-to-physician requirements standards for each specialty. In addition to the ease of application, the derivation of ratios for GMENAC facilitated the comparisons with other ratio standards.

While recognizing that the detailed GMENAC methodology and assumptions are not tailored specifically for West Virginia, the application of these derived requirements standards to the State and comparison of the results with other requirements studies is an important base from which more rigorous investigations can be undertaken.

Findings

Examination of Specialty Standards:

The variation among requirements standards is shown in Table 3. Some of the need-based or professional-judgment ratios and respective HMO standards differ within a specialty from 100 to more than 300 per cent. The greatest variation is in psychiatry: a Maryland Health Policy Plan produced by Johns Hopkins University recommended one psychiatrist for every 4,839 persons while the number of enrollees per psychiatrist for one HMO was 49,209—916 per cent higher. Relatively large differences between HMO and other ratios are also seen in anesthesiology, general family practice, internal medicine, and pathology. The range of values is relatively small within dermatology, general surgery, obstetrics/gynecology, and otolaryngology.[10]

To achieve tighter distributions within each specialty for comparison purposes, extreme values can be eliminated. For example, estimates for anesthesiology then range from 10,000 to 13,000; internal medicine from 3,300 to 3,800; and pediatrics from 5,800 to 6,700. The generally accepted range of standards then becomes apparent.

Also graphically presented in Table 3 is the position of GMENAC standards relative to other standards. The highest requirements recommend the lowest population-to-physician ratios, and are on the left side of the table. The GMENAC recommendations are either the highest or second highest requirements ratios in nine of the 16

TABLE 3

Comparison of GMENAC with Various Requirement Ratio Standards

	Source and Population Per Physician Standard				
Specialty	*Highest Manpower Requirements (Least Population/Physician)* →				*Lowest Manpower Requirements (Most Population/Physician)*
Anesthesiology	Health Policy 10,204	Gravenstein 10,764	GMENAC 11,595	BHRD/RAS 13,218	Mason-HMO 33,506
Dermatology	GMENAC 35,036	BHRD/RAS 45,401	Clawson-HMO 40,000	Paxton 40,000	Texas Med. 50,000
General/Family Practice	Paxton 2,000	GMENAC 2,899	Health Policy 4,000	Mason-HMO 4,202	Clawson-HMO 8,696
General Surgery	Health Policy 9,436	GMENAC 10,362	BHRD/RAS 10,821	Clawson-HMO 11,111	McPhedran 11,650
Internal Medicine	Shonfeld 1,042	Clawson-HMO 3,333	GMENAC 3,466	Mason-HMO 3,664	Health Policy 3,846
Neurosurgery	Texas Med. 77,000	GMENAC 91,887	Clawson-HMO 100,000	Paxton 100,000	Mason-HMO 135,011
Neurology	GMENAC 44,273	Paxton 60,000	Texas Med. 77,000	Mason-HMO 107,011	Clawson-HMO 125,000
Ob/Gyn	BHRD/RAS 8,190	Mason-HMO 9,698	Health Policy 10,000	GMENAC 10,146	Clawson-HMO 10,526
Ophthalmology	Paxton 20,000	GMENAC 20,991	BHRD/RAS 31,171	Mason-HMO 36,954	Clawson-HMO 40,000
Orthopedic Surgery	GMENAC 16,126	Paxton 25,000	BHRD/RAS 27,846	Clawson-HMO 28,571	Med. Ec. 30,000
Otolaryngology	Paxton 25,000	BHRD/RAS 27,480	GMENAC 30,438	Texas Med. 33,000	Clawson-HMO 33,333
Pathology	Health Policy 17,442	GMENAC 18,037	BHRD/RAS 19,702	Mason-HMO 74,700	Clawson-HMO 76,923
Pediatrics	Shonfeld 2,703	Mason-HMO 5,862	BHRD/RAS 6,125	Clawson-HMO 6,250	GMENAC 6,690
Psychiatry	Health Policy 4,839	BHRD/RAS 8,963	Paxton 10,000	GMENAC 10,243	Mason-HMO 49,209
Radiology	GMENAC 13,528	BHRD/RAS 14,403	Health Policy 15,957	Texas Med. 20,000	Clawson-HMO 28,571
Urology	BHRD/RAS 28,222	Paxton 30,000	GMENAC 31,623	Mason-HMO 53,577	Clawson-HMO 55,556

specialties. Though the GMENAC standards appear to call for large numbers of physicians, the ranges of the specialty requirements show GMENAC to be an extreme value only for neurology and orthopedic surgery; GMENAC expectations are substantially greater for these specialties.

For the primary care specialties, GMENAC shows one general/family practitioner per 2,899 persons, 1:3,466 for internal medicine, 1:10,146 for obstetricians/gynecologists, and 1:6,690 for pediatricians. The combined ratio for these specialists is one primary care physician per 1,134 persons (if obstetrics/gynecology is omitted, the ratio is 1:1,300). While relatively high, the GMENAC primary care ratio falls within the range of values produced by most other studies.

Also, by international standards the GMENAC primary care ratio is relatively high. Norway has a primary care ratio of 1:2,500,[11] and Canada's ratio is 1:1,700.[12] Even the 1:1,300 GMENAC ratio is greater than that of Great Britain, France, and Holland, and is about the same as the ratio for Poland,[13,14] which has a totally free-care system under state control.

Application of GMENAC Standards to West Virginia:

The requirements standards for the United States as set by GMENAC show West Virginia with a current shortage in the number of physicians in every specialty except general surgery (Table 4). While the shortages are numerically very small in some specialties (urology, neurosurgery and pathology), general/family practice, internal medicine and pediatrics show shortages of 221, 213 and 148, respectively. Psychiatry and anesthesiology also exhibit substantial shortages (97 physicians each) by GMENAC standards. To meet the current GMENAC standards, anesthesiology and dermatology must increase by two and one half times, while pediatrics and psychiatry must double their numbers.

Although West Virginia expects major growth in many specialties, 11 of the 16 specialty standards will show numerical shortages by 1990 (Table 4). The greater numerical shortages will be found in general/family practice, internal medicine, and pediatrics. Proportionally, the shortages appear worst in anesthesiology, dermatology, orthopedic surgery and pediatrics. To meet the 1990 GMENAC standards, West Virginia will require nearly three times the number of dermatologists, and more than twice the orthopedic surgeons, anesthesiologists and pediatricians projected for 1990. General surgery, neurosurgery, otolaryngology, pathology, and urology show small excesses in 1990.

The actual numbers derived from both the requirements and supply models should not be interpreted literally. There is the possibility of substantial error; therefore, comparison between the requirements and the projected supply is

TABLE 4

Comparisons of Actual or Projected Physicians and Total Number Required to Meet GMENAC Standards for West Virginia 1980 - 1990

	1980			*1985*			*1990*		
	Actual MDs	*Required To Meet GMENAC*	*Shortage ( ) or Excess*	*Projected MDs*	*Required To Meet GMENAC*	*Shortage ( ) or Excess*	*Projected MDs*	*Required To Meet GMENAC*	*Shortage ( ) or Excess*
Anesthesiology	65	162	(97)	77	170	(93)	86	176	(90)
Dermatology	22	54	(32)	19	56	(37)	20	58	(38)
General/Family Practice	427	648	(221)	449	678	(229)	530	706	(176)
General Surgery	227	181	46	217	190	27	207	198	9
Internal Medicine	329	542	(213)	374	568	(194)	430	591	(161)
Neurosurgery	18	20	(2)	22	21	1	24	22	2
Neurology	24	42	(18)	29	44	(15)	36	46	(10)
Ob/Gyn	139	185	(46)	151	194	(43)	169	202	(33)
Ophthalmology	71	89	(18)	74	94	(15)	83	98	(10)
Orthopedic Surgery	77	116	(39)	68	122	(54)	59	127	(68)
Otolaryngology	46	62	(16)	57	65	(8)	68	67	1
Pathology	99	104	(5)	119	109	10	138	113	25
Pediatrics	133	281	(148)	141	294	(153)	153	306	(153)
Psychiatry	86	183	(97)	115	192	(77)	158	200	(42)
Radiology	112	139	(27)	114	145	(31)	115	151	(36)
Urology	59	60	(1)	63	62	1	70	65	5

better made on a more general level. Accordingly, as in the GMENAC report, a broad categorization of the comparison between projected supply and requirements is made. The categorization includes three groups: expected shortages by 1990, expected balance by 1990, and expected excesses by 1990.

The shortage category includes those specialties in which requirements for 1990 exceed the projected supply by more than 20 per cent. The excess category includes specialties in which the 1990 supply is expected to exceed the requirements by more than 20 per cent. Specialties in balance, therefore, includes those in which the supply varies less than 20 per cent (plus or minus) from the requirements target. The categorization of West Virginia specialties appears in Table 5.

Nine of the 16 specialties are expected to show shortages in 1990, and the seven others are expected to be in balance. Five of the seven specialties in balance are surgical specialties; three of the four primary care specialties are expected to exhibit shortages. In West Virginia, no specialty is expected to have an excess supply in 1990 relative to the derived GMENAC standards.

Osteopaths are not included in the projections, but are included in the requirements. The computed shortages in the primary care specialties must be viewed with this discrepancy in mind.

Discussion and Summary

Deriving GMENAC requirements ratios by dividing the 1990 U.S. population by the number of physicians required in the U.S. in 1990 appeals to the state-level planners. Division of the projected state population by the requirements ratio for a given specialty provides benchmarks to which supply projections can be compared. The adjusted, needs-based requirements model used by GMENAC produces standards which, when compared with other such figures, are usually high. It appears, however, that the number of physicians in the United States will exceed requirements by nearly 70,000 in 1990, and more than 130,000 by the year 2000. Furthermore, the GMENAC panel sees surpluses in 19 major specialties (particularly general surgery, obstetrics/gynecology, radiology, internal medicine, pediatrics, orthopedic surgery, pathology, and urology) by 1990. Shortages are projected in nine specialties, including general and child psychiatry, emergency medicine, and anesthesiology.

While none of the 16 specialties examined in this study shows an excess in West Virginia for 1990, 12 of the 16 are expected to be in excess nationally. With such different situations, national recommendations (reduction of medical school class sizes, no increase in the numbers of non-physician providers, and no more than a 20-per cent increase or decrease in specialty

TABLE 5

GMENAC Standards Applied to Projected 1990 Physician Specialties

	West Virginia			*United States*		
Specialty	*Expected Shortages By 1990*	*Expected Balance By 1990*	*Expected Excesses By 1990*	*Expected Shortages By 1990*	*Expected Balance By 1990*	*Expected Excesses By 1990*
Anesthesiology	X			X		
Dermatology	X				X	
General/Family Practice	X					X
General Surgery		X				X
Internal Medicine	X					X
Neurosurgery		X				X
Neurology	X					X
Obstetrics/Gynecology		X				X
Ophthalmology		X				X
Orthopedic Surgery		X				X
Otolaryngology		X			X	
Pathology		X				X
Pediatrics	X					X
Psychiatry	X			X		
Radiology	X					X
Urology		X				X

or subspecialty graduate medical education training programs)[15] may be unsuitable for West Virginia. Moreover, the requirements ratios may not be appropriate for this state. The standard which calls for 97 more anesthesiologists, for example, seems inappropriate, given the nature (size and distribution) of the hospital system in West Virginia. Assumptions regarding homogeneous patient populations in specialty practices also may be inappropriate for the State.

Relative to the GMENAC requirements, the supply projections show shortages in all specialties except pathology, obstetrics/gynecology, and the five surgical specialties. However, urology (with 21 per cent of its members expected to be over 60 years of age in 1990) and possibly neruosurgery (nearly 17 per cent to be over age 60 in 1990) may be thought of as shortage rather than in-balance specialties. The projected shortages of orthopedic surgeons and anesthesiologists also may be amplified by age (with 21 and 16 per cent, respectively, expected to be over 60 years old in 1990). See Table 6 for a comparison of the age distribution of each specialty with assessment of the supply relative to GMENAC standards.

Hospital-Based, Surgical

While the primary care specialty problems remain the highest priority in West Virginia, the data indicate that the hospital-based and surgical specialties cannot be ignored. The problems in primary care in the 1970s should approach resolution in the 1990s. If we continue to emphasize only primary care, however, our supply of quality, trained specialists in 1990 may not be adequate.

These results can be used as guidelines for identifying topics for future study. But major new policy initiatives cannot emerge from this work alone. The importance of GMENAC lies in the process of examining the situation rather than in the numbers generated. The process has been applied nationally, but its application at the state level is even more critical. Much of the sophisticated modeling has been completed, and modification of the procedures for state-level application can be done. Review panels composed of West Virginia health professionals can follow the example of GMENAC in searching for solutions to the State's health manpower problems.

The solution to West Virginia's health manpower problems does not lie exclusively in training her own. Decision-making must take into account the national situation in addition to medical education and graduate medical education programs in the State. National surpluses, for example, may signal opportunities for recruitment in many specialties. And although this paper deals solely with statewide physician supply, the geographic distribution of medical resources undoubtedly will remain problematic into the 1990s.

TABLE 6

Expected Supply Relative to GMENAC Standards and Age Distribution of Active Permanently Licensed Medical Doctors in West Virginia in 1990, By Specialty

		Age Group		
Specialty	*Expected By 1990*	*Per Cent Under 40 Years (Projected)*	*Per Cent 40-60 Years (Projected)*	*Per Cent Over 60 Years (Projected)*
Anesthesiology	Shortage	52.3	31.4	16.3
Dermatology	Shortage	20.0	65.0	15.0
General/Family Practice	Shortage	58.5	30.2	11.3
General Surgery	Balance	45.4	39.6	15.0
Internal Medicine	Shortage	48.6	42.1	9.3
Neurosurgery	Balance	37.5	45.8	16.7
Neurology	Shortage	50.0	50.0	–
Obstetrics/Gynecology	Balance	20.7	64.5	14.8
Opthalmology	Balance	30.1	57.8	12.1
Orthopedic Surgery	Shortage	30.5	47.5	22.0
Otolaryngology	Balance	38.2	54.4	7.4
Pathology	Balance	18.1	66.7	15.2
Pediatrics	Shortage	42.5	50.3	7.2
Psychiatry	Shortage	67.1	21.5	11.4
Radiology	Shortage	46.1	48.7	5.2
Urology	Balance	12.9	65.7	21.4

This State can benefit from the experiences of others and avoid their mistakes. We recommend that a state-level, GMENAC-type planning effort be undertaken in West Virginia, and feel that the time to act is now.

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Patient Medication Instructions Program

The American Medical Association is developing a Patient Medication Instructions (AMA-PMI) program through which written information about certain drugs will be made available to physicians for distribution, along with prescriptions, to their patients. The Association anticipates that the written information will reinforce the physician's oral instructions to the patient and will enhance consumers' knowledge about the drugs they are taking.

The scientific basis for all statements made in AMA-PMIs will be drawn from the Association's compendium, *AMA Drug Evaluations*, as well as from other reliable sources.

Plans call for the first group of AMA-PMIs to be available to physicians this spring.

Special Article

West Virginia's Department of Health: Philosophy and Direction*

L. CLARK HANSBARGER, M. D.
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Doctor Hansbarger discusses a broad range of subjects, including institutional services, community health service programs, environmental health services, and planning and evaluation.

Some other areas addressed are physician recruitment, epidemiology, maternal and child health, and emergency medical services.

I most appreciate this gracious invitation, and the honor of speaking to my medical colleagues in the State of West Virginia. I am particularly honored because this is my first major address and opportunity to discuss in a medical meeting my concerns as the new Director of Health. It is also an honor, of which I am sure many of you are aware, to be speaking to you as Director of Health in the 100th anniversary of public health in West Virginia — 100 years of public health which have spanned many changes in the expectations of the citizens of the State of West Virginia of their public health programs.

This was brought to their attention in the last few years by the drastic reorganization of the Department of Health which placed in that Department the *institutional services; community health service programs*, such as local health offices, emergency medical services, maternal and child health, and health education; and the *environmental services* embracing industrial hygiene, sewer, water, air pollution, and other programs. Also in the current Department of Health is *Planning and Evaluation*, a new office on the scene which addresses certificate of need, the state health plan, and health planning in general for the Department and the state.

I not only was supportive of these changes, but have assumed this office in support of such an organization. I do not mean to imply that further changes will not be made, nor that I have agreed with all that has been done as a result of this reorganization. But certainly West Virginia can be proud of today's Department of Health, and West Virginians and my professional colleagues can expect an active, innovative and concerned public servant in the Department of Health.

As you are aware, the Department of Health has approximately 5,000 employees in 12 institutions, 55 counties and the Charleston complex. It has a $130 million budget, and is an integral part of the state complex/Governor's Office/inter-agency management system. Serving as its Director is a big job. I am enjoying it, looking forward to it, and particularly looking forward to our combined efforts to fulfill the expectations of such an organization. I would like to take the remainder of my time to address some of the problems, expectations and observations which I have made of the four offices which I have mentioned above.

Institutional Services

We shall start with *institutional services* — the largest, the oldest in its origin in the state — dating well back beyond 100 years in many instances, and the most complex and controversial of the challenges of modern public health. My observation is that the deninstitutionalization process has worked for the State of West Virginia, deinstitutionalizing literally thousands of individuals, leaving about 2,000 in the institutions who are a hard-core, dependent and deserving population who will probably require institutions the remainder of their lives.

On the other hand, the challenge is not to go too far. The challenge is to balance the deinstitutionalization with a reasonable, human approach to the same type patient in the community, and to know when you should be in a least-restrictive setting and when you may not be. Therefore, we will abandon words such as deinstitutionalization and use words such as a balanced system of service or least-restrictive programs. The type of citizens that this will address have some of

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the more traditional, chronic psychiatric problems. They also will have a need for protective services provided by an institution.

There will be many of the geriatric, developmentally-disabled, and psychiatrically-impaired patients who simply have grown old with nowhere else to go. The private sector cannot at this point address their needs, and they represent a major institutional need for our future West Virginia community.

At the same time, the forensic needs of our state remain, and I see no hope for the future where one will not need some restrictive settings for very anti-social, even criminal, elements who need psychiatric or supportive medical care. Finally, a new area on the horizon is the need for residential-type settings and personal-home type settings for our citizens in very remote rural areas where many of these institutions are located and where private enterprise will not yet find interest in nor find it profitable to place fee-for-service type programs. The institutions (at least the sites on which our present institutions reside) well may play a part in the need.

The present legislative interest is reflected in answering many of the needs of the new institutional service's balanced system and reflected in their approval of the Hospital Service Revenue Fund which will allocate funds for capital improvement from monies earned by Medicare, Medicaid and other third-party-earned income that the certified beds in these institutions will quality for. This will allow us a full array of opportunities to express for the public a facility-type approach to many of the balanced needs. Certainly it will address the restorative needs of excellent buildings which are in poor repair, and the need for new buildings on the present sites. But it also well may address the equipment/facility needs within many communities in the state in a balanced system which would develop residential-type facilities in the same communities where local residents could be afforded the same opportunity closer to home that they may well have had in larger, more centralized and more impersonal-type settings.

Developmentally Disabled

Secondly, the results of the Macel Medley court efforts, and the juvenile justice investigations, have shown that the state must and can address our unfortunate developmentally disabled. In this process we are currently the recipients of $1 million for a foster home, residential home placement program addressing some 200 children in Colin Anderson, and other state facilities. This will be the first step of some very serious steps that we all must make towards the less restrictive, closer home settings which all of these children will benefit by and everyone will admit is not necessarily met in a large institution. The outcome of this, I think, will set the pace for a future balance of services in the state which will be felt over the next decade or so.

In the *community health service* area we see the successful development of an integrative, comprehensive approach to local community health needs. This is being met through several efforts in local health department development. We have several examples of experimental and model-type programs. One is the inter-county attempt such as is occurring in Pocahontas County, Brooke County and others. Here, the combination of local health programs and federal programs such as community mental health centers are being asked to pool their efforts and finances in a more effective and efficient way. And, there is the multi-county model which is occurring in Region V (the general Parkersburg area) where committees of consumers, commissioners, health officers and health planners are developing a single responsibility for all six counties in public health. This program, I feel, could be quite successful and is an example of bottom-up planning. I have endorsed this as being the only way to plan such regional types of programs, and will continue to require that it not only reflect county commission involvement but also a specific commitment to each geopolitical area — that is, that it reflect the efficiency of combining many resources, funds and management bodies within each county boundary.

To Develop Manual

The local health officers, public health association members and others have been asked to contribute to a task force to define and develop a manual of basic service provision for every local health department. This manual would be the basis of a performance measure by which we can reflect to you, the public in general and certainly the legislators and the Governor the use of public funds, the value of public services and the expectation of a public program. This modern public health will come at some odds with your concept of public health at times because it will suggest that it has a private enterprise viewpoint.

This is particularly so if fees are to be collected, as I suggest they will be. They are necessary for a modern local health department because there are many services rendered to those

who can pay that no one else has rendered, and at the same time should be free for others who are less fortunate than you and I. It will also show an integrative service commitment; that is, where private practice or fee-for-service or private enterprise has not been able to provide services, they will be provided by the local health departments.

Public Health Position

This is particularly so in certain areas such as hypertension, cancer prevention or examination, health education, or services such as tuberculosis and venereal disease. The modern state of the art is that West Virginia's big killers now are accidents, cancer and hypertension. If this is so, public health must take a position whenever the need for services is not met by other providers.

Also in community health services, we have developed a physician recruitment program in the Human Resources Program. This has been contributed to a great deal and given a great deal of credibility by having Dr. Walter Fix, your present President, on that committee. It was only after his approval and the approval of many of your colleagues, as well as the universities, that the Department of Health undertook the final responsibility for physician recruitment, particularly for rural communities in West Virginia. Mr. Bob Whitler has now been recruited and will be at work in helping us find physicians for rural and more remote communities.

In the area of epidemiology, we have been very ably assisted by Loretta Haddy and Dr. John Brough, who have established a quite credible epidemiology section. They have been found to be extremely responsive and knowledgeable in many of the public health fields requiring epidemiology. Your own contact with them will be increased in the near future when the Board of Health approves the final rules and regulations of reporting not only infectious diseases but also cancer. We need to approach cancer in a more epidemiologically-sound way. The clustering of types of cancer in West Virginia certainly should help us determine the direction we might go in any one particular community to fight this disease.

In the main office thrust of community health services, you will be delighted to know that we are continuing to decentralize our responsibility for many of the federal and state direct-care programs to local providers, be they hospitals, be they private practitioners or be they community health clinics or local health departments. This includes the EPDST screening of the Medicare contract, ECD, Family Planning, WIC—any of these we feel should be returned to the community where many of you as local health officers and local medical association members can influence the mainstreaming of these programs to all of our citizens.

In the area of maternal and child health, I am proud to say that Dr. Jack Basman's program has been extremely effective, and we all should be quite grateful for their efforts and your efforts, particularly the perinatal committee and certainly the obstetricians and pediatricians, in dropping the neonatal mortality rate to below the national average this year. This is a result of a lot of effort on everyone's part, particularly practitioners, in systemizing the care of neonates. It is a model of both transportation and secondary and tertiary care which must be taken seriously by such statistics. I suggest that such a model could be adapted to the victims of accident, cancer and other catastrophic illnesses in the state.

EMS Program

In the EMS program, recertification of our EMTs and paramedics is now well under way, and we will stick to our guns that this is an extremely important recertification process. However, there have been questions, even by some of you, that this will be harsher than was required and would, as a matter of fact, cut down on volunteerism. I suggest to you that this has not been the experience in other states. We will not want to discourage the full capabilities and the results of re-education towards better care for those patients that you will eventually be responsible for in many cases. I am sure you would admit that you would like them as well taken care of in transport as they will be in your care in a hospital or emergency room setting.

Finally, what other new public health efforts will be made? I have already mentioned one, and it is that we will in a very firm and diligent fashion address the need of public health toward cancer, hypertension and accident mortality and morbidity figures in the State of West Virginia. This will be done through health education, through direct services and through preventative counseling. In addition to that, as a continuum of care philosophy which implies non-restrictive types of environments or least restrictive as possible, we will address the needs of the elderly just as we are also currently addressing the subject in the developmentally disabled and the rehabilitative needs of postsurgical or trauma individuals.

The implications should be that all of you should have access to public health nurses and health department employees in all fields who

have an understanding of the need to keep at home whenever possible, keep independent whenever possible, keep least restrictive whenever possible the citizens of this state whether they be elderly, developmentally disabled, rehabilitatively disabled or vocationally impaired. We will then carry out a care management and educational system throughout the Department of Health which will keep our employees informed as to the services, the opportunities and the encouragement for home health services in each of these areas. We ask that you help us in this endeavor, since many times it is the physician's advice that a family takes. It is a physician's inclinations that they respond to, and it is a physician's experience that they depend on. Therefore, your being informed, your being enthusiastic, and your being supportive of home services for these various areas will be the most telling factor to the success of these programs.

In *environmental health services*, we have a new director, Mr. Robert Wheeler, who comes to us from the Public Service Commission and is a knowledgeable public servant as well as an engineer. The areas in which he is going to be most conscious of over the next few years are in the old and familiar patterns of the needs of water and sewerage problems. West Virginia, after 50 to 75 years of coasting, has suddenly come on hard times, both in funding as well as the state of the art in water and sewerage care. I state to you that you may want to refer to your old text books in public health and infectious disease control and be ready for the boil-the-water announcements that will begin to appear, more moratoriums on housing and other areas as a result of the breakdown of sewerage and water treatment plants.

Emergent Problem

This will be an emergent type problem in the next 10 years. We are just beginning to see the signs of your efforts towards the education of the public in hygiene, your efforts towards the development of public service commissions in your communities and your efforts to awake the communities to the value of proper water and sewerage treatment. This will be most appreciated. Certainly we, as physicians, would want to help prevent a recurrence of the catastrophies of the nineteenth century.

In the area of cancer prevention, industrial hygiene will be highlighted over the next few years. I hope that by working with the federal programs, the Department of Natural Resources, the Department of Agriculture and the Department of Labor we shall be able to alert the public and industries to the significance of those clusters of both cancer and other illnesses which might suggest that industry will want to take a constructive look at these patterns and its possible role in the workplace for our citizens.

Finally, in the *planning and evaluation office*, I would suggest that often we may be taking divergent views. But also, I feel we will assume complementary views and attitudes towards rules and regulations in facility evaluation and in infectious disease and other types of areas; that is, we will be as liberal as possible to make the work as easy and inexpensive as possible. We will make every effort to be as constructive and helpful technically in developing a protective environment and meeting the objectives of any particular facility or certification. But, we will also be regulatory when we have found that there seems to be no reasonable cooperation with the Health Department in meeting the requirements for the safety and welfare of the citizens. This will be taken seriously, as exemplified by the recent court appearances in Clarksburg.

In order to simplify, update and make more humane the regulatory process in the rules and regulation area, we have asked Mr. Joe Richards to assume the division director's position in this area. He will address, for the agency's many programs, the updating of these rules and regulations.

Certificate of Need

We would also ask that the state health plan and the certificate of need process be viewed more sympathetically than I think many of you have—not because I think they are the best way to manage planning or the best way to contain costs, but because they do suggest a sophistication of consumer understanding and a sophistication of interrelating need assessment with reality. They also serve as a means of addressing the tremendous burden that many of our citizens and many of you must assume in a financial crisis situation where medical costs are extremely high and at a time inhibitive of good medical care. I do not intend to assume that your involvement has not already been constructive, but in many instances I have found that your cooperation has not always been as voluntary as I feel we might all profit by. I ask and certainly extend my offer of cooperation in any area and will address any questions that you have concerning these sensitive issues.

I cannot leave today without bringing to your attention that the West Virginia Department of Health has already started a cooperative and hopefully constructive relationship with the new

federalism in Washington. It has always had a good working relationship with the Department of Health and Human Services. It will continue to do so, and we will continue to respond as much as possible to the cost containment of federal expenditures. However, I also point out that this will probably mean as much as a $5-million loss of health money which I feel has, to a large part, been well spent. We will, and many of our communities well might, suffer by its loss. Your attitudes, as citizens of West Virginia, and of the Legislature, towards restoring some of these funds will be challenged, and I am hoping that you will take a very careful look at the needs of the state and the need for continued tax support for many of the programs which appear to me to have been not only worthwhile, but ably run. We will be working with this organization, and with many of you individually, in making sure that the case is well-stated and that the need is addressed in the most efficient and effective way. Thank you once again for this invitation. I'm looking forward to many opportunities to see many of you again.

Manuscript Information

Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be typewritten, triple-spaced, on one side only of firm (no onion skin or flimsy), standard letter sized (8 ½ by 11 in.) white paper. Wide margins (at least 1 ¼ in. on left) should be left free of typing. On the first or title page should be shown the title of the article, the name (or names) of the author, and his degrees. Pages should be numbered consecutively, the page number being shown in the right upper corner along with the surname of the author.

Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

A short abstract summarizing the manuscript should be included. This should be typed in double space on a separate page.

Authors are requested to submit a carbon copy with the original.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for reproduction should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. Cost of printing black and white photos in excess of 4 will be billed to author, and no more than 25 references will be published free of charge to the author. A legend should be provided for each illustration and, preferably, attached to it.

All scientific material appearing in *The Journal* is reviewed by the Editorial Board. Manuscripts should be mailed to The Editor, West Virginia Medical Journal, Box 1031, Charleston, W. Va. 25324.

A message from . . .

The President

ALL PATIENTS MUST BE TREATED

Some months ago, in one of my presidential pages, I referred to the obligation we have as physicians to treat all patients regardless of category. It has become obvious, during our travels about the state, that fewer and fewer members of our Association are so doing. I have difficulty offering an explanation to those who ask why. There is more than a single reason why we should be willing to give our services to those in need. I shall not write of the various reasons that members of the lay press are constantly referring to. I shall speak rather to a more practical reason.

As all of you know, the eighties will offer new challenges to the medical profession. One of these is pro-competition. This concept is to allow persons with limited training and ability to provide those services which they may be judged "capable" of doing. This means that limited practitioners; namely, physician's assistants, nurse practitioners, optometrists, podiatrists, and others will campaign even more vigorously for their place in the sun. These groups even now are lobbying very actively to become primary health care providers by legislative fiat. We, as physicians, feel that we, by virtue of our educational background, training, ability and capability, are the only ones who can render quality medical care. I think that without question this is true, and one would be hard-pressed to find anyone who would disagree with this fact.

This is where the paradox arises. On the one hand, we say that we alone can provide overall medical care, the quality that the people of this state and nation deserve, and should receive. On the other hand, we have singled out a group of people whom some of our members will not treat; namely, welfare recipients.

We deny services to this group because we are not reimbursed at a rate we consider reasonable, and because we as physicians have been singled out to subsidize medicaid patients, whereas others who provide a service or sell a product to them are not expected to do so. This may seem a valid reason, but we provide a unique service, one which we alone can provide. How can we then relinquish this to limited practitioners, people we feel are not qualified to do so?

In many cases, the welfare category of patient is sicker due to life patterns prevalent in this socioeconomic bracket and thereby requires even more diagnostic and therapeutic acumen. How can we be convincing before legislative bodies that will deliberate and legislate in matters relative to limited practitioners when this paradox exists? Even more important, are we true to our creed that says we will provide our unique service to all? This is our responsibility, our obligation, and our duty.

John B. Markey

John B. Markey, M. D., *President*
West Virginia State Medical Association

The West Virginia Medical Journal

Editorials

The Publication Committee is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author shall be held entirely responsible. Editorials printed in The Journal do not necessarily reflect the official position of the West Virginia State Medical Association.

MEDICAL MANPOWER II

In the January issue we ran a Special Article entitled, *The Supply of Medical Doctors in West Virginia: Past Trends and a Projection.* We promised you a follow-up using Graduate Medical Education National Advisory Committee (GMENAC) standards to make similar predictions. That article appears on page 32.

Alone, each article is impressive. Together, their effect is magnified. Read them both. It will be time well spent.

Just an observation or two. We will not quibble with the statistics. The figures indicate no surplus in any speciality in West Virginia in 1990. Such a likelihood is not in keeping with currently observable trends in key specialities. We do question the apparent assumption that in the face of a national surplus of 70,000 physicians in 1990 some of this surplus will not migrate into West Virginia.

There is shown in the study an interesting glimpse of the future and observation of the present for those currently in practice in West Virginia. GMENAC standards indicate a current shortage of every speciality except general surgery in West Virginia. If these admittedly liberal standards are approached in 1990, it will mean that physician caseloads will be significantly lower in the next decade. We are working too hard but our burden is soon to be eased!

We are not necessarily in agreement with the conclusion that Review Panels of West Virginia health professionals are needed to search for solutions to the state health manpower problem. Solutions arrived at by such panels are likely to be no better than the solutions searched for and found by our Health Systems Agency and Certificate of Need Program. As in these other bureaucratic ventures, the solutions promulgated and enforced stand as great a chance of creating chaos and of inhibiting those forces, market or otherwise, which tend toward a workable solution, as they do of producing even temporary benefits.

A few things are certain: availability of health care will improve in West Virginia in the next decade; because more health care is available it will be used; because it is used the health of West Virginians will improve, and because more health care is used the total cost of health care in West Virginia will rise.

The consequences of the latter conclusion are likely to be of continuing concern to West Virginia physicians during the next decade and beyond.

DR. HANSBARGER

In a *Special Article* in this issue of *The Journal,* Dr. Clark Hansbarger reveals himself to be a reasonable and responsible administrator of the West Virginia Department of Health, and a conservative within the liberal confines of a public health philosophy required for the acceptance of the position he now occupies.

He has shown a quick and sure-handed grasp of the organizational details required for the understanding and guidance of a large and important segment of our state government.

We quite frankly admit that we were initially anxious about Doctor Hansbarger's appointment as Director of the Department of Health. The reassuring factor of an M.D. following his name was somewhat tempered by the memory that the last Director was similarly favored. Our present Director, however, has caused us, through his manner and particularly through his actions, to reaffirm our tendency to trust and to regard him highly and even to enjoy at least a partial amnesia for his predecessor.

It is unlikely that everything Doctor Hansbarger says or does in the future is going to please us. This does not bother us nor, we are sure, will it him. The Director of Health does have our respect, and we offer him belatedly, but sincerely, our best wishes.

Generally running concurrently with even-year legislative sessions in West Virginia is another political exercise of equal importance and significance. It's the filing of candidacies for nomination to legislative, and other, seats and public offices in the June primary election.

THAT TIME AGAIN

To even the most uninformed and non-observant, it should be clear that election trends in recent years at least must be viewed with concern. The picture will change only if the electorate—the people who really count—will such a change. And to accomplish this, the electorate must become just that—a force really felt in the selection of public officials.

Logically, there's no group for whom an election should loom more important than physicians. Who are the chief day-by-day advocates of accessible, quality medical care? Doctors, of course; and they are doing both their patients and the public in general a disservice if they fail to accept that responsibility.

Recent years have brought increasing numbers of health and medical issues to the legislative forefront, both in West Virginia and nationally. These issues must be faced head-on, fairly, logically and with the public health always of paramount concern. Positive resolution of the questions at hand only can be accomplished by knowledgeable, understanding and concerned public representatives in the Legislature, and the Congress.

Those kinds of lawmakers must emerge from the election process. They must be identified and supported at the precinct, county and district levels by those who can help them muster support at the ballot box. As the chief patient advocates, physicians must be in leadership roles in that identification and support mission.

CHARLES A. HOFFMAN, M. D. RIP

A familiar form will be missing from our midst. Lanky is a term that almost seems to have been invented to describe Carl Hoffman. The long easy gait. Erect, yet his shoulders slightly hunched — perhaps a kindness to make those over whom he towered more comfortable in his presence. The open smile, the easy grace and manner of a genteel, yet self-assured spirit. And the confidence.

Carl inspired confidence. And well he should have. He always came prepared and spoke only whereof he knew. That is how he earned his way to the highest honors the medical communities in Huntington, the state of West Virginia and all the AMA and his specialty organizations in urology could bestow upon him.

Charles A. Hoffman, M. D., was born January 24, 1904, in Ironton, Ohio. He was an orphan by age 10 and was raised by six aunts. He began earning his living as an errand boy, did manual labor for the C&O Railroad and then worked evenings at a drugstore while earning a degree in Pharmacy at Ohio State.

Before he attended medical school at the University of Cincinnati he owned and operated his own drugstore in Ironton. In addition to his M. D. from Cincinnati and the degree in Pharmacy from Ohio State, he earned a Bachelor of Arts from Marshall. He later received honorary degrees from the University of Cincinnati, Marshall University, Drury College and Alderson-Broaddus College.

Doctor Hoffman began his career in organized medicine in Cabell County, serving as President of the Cabell County Medical Society in 1948. He was President of the West Virginia State Medical Association in 1957-58 after serving on the Council of the Association; was a West Virginia Delegate to the AMA House of Delegates in the 1960s; was elected to the AMA Board of Trustees in 1969, and served as Secretary-Treasurer of the Board until he was elected President-Elect in 1971.

Carl Hoffman was the first of the medical leaders to foresee the Professional Liability Insurance crisis we have recently experienced. It was through his wise counsel that the AMA and this state Association warned its members and took what measures were necessary to protect physicians from the looming tragedy of the loss of Professional Liability Insurance. He, more than any other person, is responsible for the fact that West Virginia has enjoyed a stable Professional Liability Insurance market.

At the 1981 Annual Meeting, a resolution was passed by the House of Delegates of the West Virginia State Medical Association directing its Council to provide a suitable means to honor Charles A. Hoffman at the 1982 Annual Meeting for all of his many services to the physicians of this state. Carl will not be there to receive this honor. He died December 17, 1981, at his home in Huntington.

His presence will be felt when he is honored this coming August and, we are certain, his continuing presence will be felt during the affairs of the West Virginia State Medical Association for many years to come. His was a large figure, his counsel good, his influence great.

GENERAL NEWS

Michigan Specialist In ENT Annual Meeting Speaker

A University of Michigan otorhinolaryngologist will speak Friday morning, August 27, during the 115th Annual Meeting of the West Virginia State Medical Association August 26-28 at the Greenbrier in White Sulphur Springs.

Dr. Malcolm D. Graham will talk on "Dizziness: Current Thoughts on Diagnosis and Management" as part of a "Symposium on Common Disorders of the 'Eye, Ear and Mouth" at the first general scientific session, it was announced by Dr. Carl J. Roncaglione of South Charleston, Chairman of the 1982 Program Committee.

Malcolm D. Graham, M. D.

The announcement of the paper to be given by Doctor Graham is the first to be made by the Committee in disclosing 1982 convention plans.

The Annual Meeting will open with a preconvention session of the Association's Council and the first session of the House of Delegates on Thursday morning and afternoon, August 26; and end with the second and final House session and reception for new Association officers on Saturday afternoon and evening, August 28.

The second and final scientific session will be held on Saturday morning, with about a dozen sections and affiliated societies having business and scientific meetings on Friday and Saturday, primarily in the form of breakfast and luncheon meetings.

Professor, Vice Chairman

Doctor Graham is Professor and Vice Chairman, Department of Otorhinolaryngology, at the University of Michigan, where he also practices otology, neurotology and skull base surgery.

Recipient of the 1978 Distinguished Service Award of the American Academy of Ophthalmology, he practiced otolaryngology and otology in Victoria, British Columbia, Canada, from 1962 to 1971, and otology in Los Angeles from 1971 to 1978, when he went to the University of Michigan.

Doctor Graham's recent teaching activities at the University include that as faculty instructor, Temporal Bone Surgical Dissection Laboratory, Resident Evening Drilling Sessions, Department of Otorhinolaryngology. From 1976 to 1980, he served as Organizing Chairman for the September, 1980, International Facial Nerve Symposium in Los Angeles; and has been a course instructor at a number of annual meetings of the American Academy of Ophthalmology and Otolaryngology.

He is the author of two books, the most recent (1978) entitled *Cleft Palate: Middle Ear Disease and Hearing Loss;* and is the author or co-author of chapters in 10 books.

Doctor Graham received his undergraduate training and M. D. degree (1957) from McGill University in Montreal, Canada; an M.S. degree in Otolaryngology in 1962 from the State University of Iowa; and an M.S. degree in otology from the University of Southern California, Los Angeles, in 1976.

Internship, Residencies

He interned at Colorado General Hospital, University of Colorado; and completed residencies in general and specialized surgery at Veterans Hospital in Victoria, State University of Iowa, and Ear Research Institute in Los Angeles.

Serving on the Program Committee with Doctor Roncaglione are Drs. Jean P. Cavender, Charleston; Thomas P. Long, Man; David Z. Morgan, Morgantown; Kenneth Scher, Huntington, and Harry Shannon, Parkersburg.

Dr. William Y. Rial of Swarthmore, Pennsylvania, who will be installed as the President of the American Medical Association in Chicago in June, has been invited to address the first House session on Thursday.

Opening convention exercises will precede the Friday morning scientific program.

Topics for the Saturday morning scientific session—all to be tailored for a general audience

—will cover new developments and/or trends in urology, sports medicine, plastic surgery and neurology-neurosurgery.

Doctor Shannon, during the second House session on Saturday, will be inaugurated as President to succeed Dr. John B. Markey of Charleston.

Auxiliary Meeting

The Annual Meeting of the Auxiliary to the State Medical Association, with Mrs. Logan W. Hovis of Vienna in charge as the Auxiliary's President, again will run concurrently with the Association's convention.

More specific information relative to other general session topics and speakers will be provided in upcoming issues of *The Journal.*

Reservation forms provided by the Greenbrier, and included with an Association Legislative Bulletin, were mailed to all Association members in January. Those planning to attend the Annual Meeting are encouraged to give them their earliest possible attention.

Eye Surgery, Implant Course Scheduled In Bluefield

A course on Phacoemulsification-Extracapsular/Posterior Chamber Implant will be held May 21-22 in Bluefield by the Blaydes Foundation for Ophthalmic Research and Continuing Education.

Course directors will be J. Elliott Blaydes, M. D., and Theodore P. Werblin, M. D., Ph.D.; faculty members: Jared M. Emery, M. D.; William Harris, M. D.; Buol Heslin, M. D.; Guy E. Knolle, Jr., M. D.; Thomas Mazzocco, M. D., and Robert Peiffer, D.V.M., Ph.D.

Phacoemulsification and extracapsular instruction will include step-by-step procedure of phaco and extracapsular surgery, mechanics of the Cavitron machine, phaco and extracapsular lab in animal eyes, and observation of live surgery. Posterior Chamber and IOL Implant instruction will include Kratz, Shearing, Sheets, Simcoe and Sinskey lenses; indications and complications; observation of live surgery; lens insertion labs; A & B-Scan workshop; endothelial micrography workshop, and examination of postoperative cases.

There will be a limited enrollment to insure individualized instruction. Tuition is $825 which includes two buffet breakfasts and two buffet lunches. The course is accredited by Cavitron and by the American Medical Association for 16 hours of credit in Category 1 of the Physician's Recognition Award.

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1982, as compiled by Dr. Robert L. Smith, Assistant Dean for Continuing Education, and J. Zeb. Wright, Ph. D., Coordinator, Continuing Education, Department of Community Medicine, Charleston Division. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of The Journal.)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Morgantown, Charleston and Wheeling campuses. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, 3110 MacCorkle Avenue, S. E., Charleston 25304; Office of Continuing Medical Education. WVU Medical Center, Morgantown 26506; or, Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

March 19, Charleston, 9th Annual Newborn Day

Regularly Scheduled Continuing Education Outreach Programs from WVU Medical Center/ Charleston Division

Buckhannon, St. Joseph's Hospital, 3rd floor, 3rd Thursday, 7-9 P. M.—Feb. (winter break)

March 18, "Drug Interaction, Part II," Carl Malanga, Ph.D.

April 15, "Substance Abuse: Food, Alcohol & Drugs," David K. Walker, M. D.

Cabin Creek, Cabin Creek Medical Center, Dawes, 2nd Wednesday, 8-10 A. M.—Feb. 10, "Common Musculo-Skeletal Problems in Children," Robert Ghiz, M. D.

March 10, "Common Endocrinological Problems" (speaker to be announced).

Gassaway, Braxton Co. Memorial Hospital, 1st Wednesday, 7-9 P. M.—Feb. (winter break).

March 3, "Managing Trauma in the Small Hospital ER and During Transport" (speaker to be announced).

Madison, Madison-Danville Junior High School, West Madison, 2nd Tuesday, 7-9 P. M.—Feb. 9, "Drug & Alcohol Abuse" (speaker to be announced).

Oak Hill, Oak Hill High School (Oyler Exit, N 19) 4th Tuesday, 7-9 P. M.—Feb. 23, "Fluid & Electrolyte Balance: Monitoring & Management," Warren Point, M. D.

Welch, Stevens Clinic Hospital, 3rd Wednesday, 11 A. M-1 P. M.—Feb. (winter break).

March 17, "Rheumatology Update," Anthony DiBartolomeo, M. D.

April 15, "Thyroid Disease," Richard Kleinmann, M. D.

May 19, "Infectious Diseases in Children," Edwin Anderson, M. D.

Whitesville, Raleigh-Boone Medical Center, 4th Wednesday, 11 A. M.-1 P. M.—Feb. (winter break).

March 24, "Common Endocrinological Problems," Richard Kleinmann, M. D.

April 28, "Classification & Diagnosis of Diabetes Mellitus," Stephen Grubb, M. D.

Williamson, Appalachian Power Auditorium, 1st Thursday, 6:30-8:30 P. M.—Feb. (winter break).

March 4, "Obstetrics Update: Labor & Delivery," Robert Patchell, M. D.

April 1, "Eye Trauma," George Hamrick, M. D.

Pharmacists Ask Consideration Of Prescription Problems

The West Virginia Pharmacists Association, through its Professional Relations Committee, has asked physician consideration of problems it has identified as resulting from use of prescription pads of unusual sizes, and the writing of a number of drug orders on one prescription blank.

Elaboration of the pharmacists' concerns is being provided in this article at the request of L. Dale Simmons, M. D., of Clarksburg, Chairman of the State Medical Association's Interprofessional Relations Subcommittee on Medicine and Pharmacy.

"Perhaps, at first examination, these matters seem trivial and unimportant," the pharmacists' group noted. "However, to the pharmacist working with perhaps hundreds of prescriptions daily, they become unnecessary (the pharmacists believe) and worrisome headaches."

Pharmacists, it has been explained, are required by both state and federal regulation to maintain every prescription filled on file for a minimum of two years. These prescriptions must be easily accessible for refill and reference purposes.

"Remembering that we are dealing with mere slips of paper, those that vary greatly from standard size are very difficult to file properly. Thus, this presents the potential for loss of these very important documents," the explanation continued.

A pharmacist also is required by law to date and initial a prescription each time it is filled—

A day-by-day review of resolutions introduced; reference committee considerations and recommendations, and pending House of Delegates action occupies West Virginia's delegation to each American Medical Association business meeting. In the picture at the left, Drs. Richard E. Flood of Weirton and Frank J. Holroyd, Princeton, the state's AMA Delegates, review handbook material at a West Virginia caucus during the December House session in Las Vegas. Similarly engaged, second from left, is Dr. John B. Markey of Charleston, the Association President. Also pictured are two West Virginia University medical students who took part in their section meeting and joined the West Virginia physicians for meetings, Chad L. Rolfe (left), Monongalia County, and Scott A. McNamara, Ohio County.

originally and with each refill. Pharmacists have noted certain traditional information that must be put on a prescription. Such information, useful and necessary from the standpoint of both the pharmacist and the patient, includes quantity and brand dispensed; and special problems a patient might have (for example, an individual has arthritis and thus could not open a so-called child-resistant top on a bottle).

Potential for Error

If there are numerous prescriptions written on one form, the pharmacists have emphasized, there is not room to record such vital information. They added that a "crowding" of more than one drug order on a form also creates greater potential for pharmacist error; and, compounded perhaps with problems in legibility of handwriting, can necessitate bothersome telephone calls to physicians' offices for clarification.

While some pharmacists have felt an alternative to the problem is to reproduce each prescription on a separate blank, they have explained that this can result in increased costs to patients and time those individuals must wait for a prescription to be filled.

It also can reduce, the pharmacists have noted, time available for consultation with patients relative to proper storage of medication, proper compliance and other professional relationships they have.

The pharmacists committee accordingly has asked that physicians consider placing only one prescription on each form.

Dr. 'Carl' Hoffman, Ex-President Of AMA, Dies in December

Dr. Charles A. Hoffman, Huntington urologist and President of the American Medical Association in 1972-73, died on December 17 at his home there after a long illness. He was 77.

Charles A. Hoffman, M. D.

Known to his friends as "Carl," Doctor Hoffman also had served as President of the American Urological Association in 1967-68. He was the only West Virginia physician to serve as head of the AMA or the AUA.

In addition, he had served as President of the West Virginia State Medical Association, the American Association of Clinical Urologists and the International College of Surgeons.

He received several federal appointments, including membership on the President's Conference on Medicare, and the President's Commission on Professional Liability.

He was the author of a book published in 1979, entitled *God, Man and Medicine*, and wrote numerous articles on urology. He also made two medical motion pictures.

Over a career of more than 40 years, Doctor Hoffman became one of the most prolific and

Reviewing reference committee recommendations to be considered by the American Medical Association House of Delegates during the December interim business meeting in Las Vegas are (left to right) Drs. Jack Leckie of Huntington and Harry S. Weeks, Jr., Wheeling, AMA Alternate Delegates from West Virginia; and Harry Shannon, Parkersburg, the West Virginia State Medical Association President Elect.

distinguished members of his profession, becoming the recipient of the Ramon Guiteras Award in 1977, presented to him by the AUA in recognition of his outstanding contributions to the art and science of urology.

Born in Ironton, Ohio

Doctor Hoffman was born in Ironton, Ohio. His father died when he was a year old, and his mother died when he was 10. He and his younger sister, the late Madeline Feil, also a physician, were raised by six aunts in Ironton.

When he was 11, he began working in a drugstore as an errand boy. Later, he worked for the Chesapeake & Ohio Railway as a boilermaker's helper and as a guard collecting tolls on the Ironton-Russell, Kentucky, bridge across the Ohio River.

He continued to work nights and weekends in drugstores while he was a student at Ohio State University, where he received a degree in pharmacy in 1925, but all the while he kept his original goal to be a physician.

He worked as a pharmacist in Huntington and later bought a drugstore in Ironton. A few months later, he began taking pre-medical courses at Marshall College. After earning an A.B. degree in 1931, he enrolled at the University of Cincinnati where he earned a B.M. degree and M. D. degree (1935). He later received honorary doctor of science degrees from the University of Cincinnati, Marshall University, Drury College and Alderson-Broaddus College.

During his senior year at Cincinnati he became seriously ill, eventually having one of his kidneys removed.

Doctor Hoffman received his urological training and served his internship at the former Chesapeake & Ohio Railway Employees Hospital in Huntington.

Instructor at Marshall

From 1940 to 1944, he was an instructor at Marshall, teaching human anatomy, pathology, embryology and physiology in the School's Pre-Medical Department.

Doctor Hoffman was for a number of years Chairman of the State Medical Association's Insurance Committee, beginning with its inception in 1952. Among many other appointments and posts held during his active career were those as Secretary of the Board of Directors of the National Association of Blue Shield Plans; member of the West Virginia Board of Medicine; President of the Cabell County Medical Society in 1948; member and Treasurer of the Board of Directors, Marshall University Foundation, Inc. (loan fund for students); and President of the Huntington Rotary Club, the Huntington Chamber of Commerce, and the Huntington YMCA.

He was named Huntington's Citizen of the Year in 1941 by the Junior Chamber of Commerce.

Doctor Hoffman was a member of the Board of Directors of several insurance and finance companies, including the North Central Life Insurance Company of St. Paul, Minnesota; and, in Huntington, West Virginia Life Insurance Company, Allstate Finance Company, and General Securities of Huntington.

Library Room Dedicated

In 1975, Marshall University dedicated a room in the James E. Morrow Library as the "Dr. Charles A. Hoffman Room" to house the papers he had written over the years and, in 1980, the "Charles A. Hoffman Lecture" was established by the American Association of Clinical Urologists to be given at each annual meeting.

Doctor Hoffman is survived by his widow, Margaret Lynn Hoffman; three daughters, Mrs. Lynn Martin of Huntington, Mrs. Sarah Smith of Bronxville, New York, and Mrs. Joyce Sargent of Washington, DC; one son, Dr. Charles A. Hoffman, Jr., of Fayetteville, North Carolina; a sister, Mrs. Ralph Clark of Ironton, and 11 grandchildren.

Marshall Internal Medicine Residency Approved

The Marshall University School of Medicine's Internal Medicine Residency Program has received full accreditation from the Accreditation Council for Graduate Medical Education (ACGME).

Dr. Maurice A. Mufson, MU Medicine Department Chairman, was notified of the program change from provisional accreditation status to full accreditation by Dr. John C. Gienapp, Secretary of the ACGME Residency Review Committee for Internal Medicine.

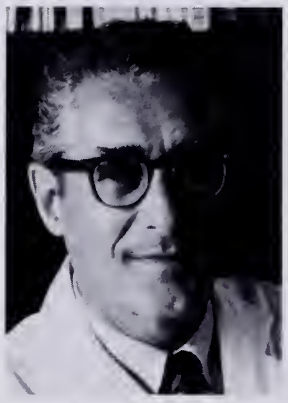
A three-year program, the Internal Medicine Residency received provisional accreditation in 1977 and currently has 16 residents receiving training at Cabell-Huntington Hospital, St. Mary's Hospital and the Huntington Veterans Administration Medical Center. "Eventually, we hope to have 30 residents in the program, 10 in each year," Doctor Mufson said.

Varied Program Announced For AAFP Meeting

Some 12 physicians will speak on subjects ranging from pneumonia to coronary spasm during the 30th annual Scientific Assembly of the West Virginia Chapter, American Academy of Family Physicians (AAFP).

The meeting will be held April 16-18 in Morgantown at the Lakeview Inn and Country Club.

Scientific sessions are scheduled for Friday morning, April 16, and Friday afternoon, Saturday morning, Saturday afternoon, and Sunday morning. The Saturday morning session will be a new continuing medical education seminar, "Anxiety: The Therapeutic Dilemma," sponsored by Abbott Laboratories. The seminar gives priority to demonstrating approaches for recognizing and managing dependence-prone patients.



Marvin Moser, M. D.

The program is acceptable for 14 Prescribed hours by the AAFP, and is approved for 14 hours in Category 1 of the Physician's Recognition Award of the American Medical Association—plus up to 10 hours through Roche Clinical Conferences and an additional 18 hours through Abbott's home self-study course as part of Saturday's seminar on "Anxiety: The Therapeutic Dilemma." A total of 43 hours can be obtained.

West Virginia Attorney General Chauncey H. Browning, Jr., Chairman of the Governor's Task Force on Health Care Costs, will be the banquet speaker Saturday evening. His topic will be "First Post-Legislative Report on Health Care Costs."

Family physicians will be welcomed to the scientific assembly by Thomas L. Ritz, M. D., of Wheeling, President. Robert D. Hess, M. D., of Clarksburg, President Elect, is Program Chairman.

The speakers and topics will be:

Friday Morning: "New Pathogens in Community-Acquired Pneumonia" — Martin C. McHenry, M. D., M. S., Head, Department of Infectious Diseases, The Cleveland Clinic Foundation; "Perspectives on Multiple Risk Factor Intervention Trial (MRFIT)"—Marvin Moser, M. D., Clinical Professor of Medicine, New York Medical College, and Physician-in-Charge of Hypertension Clinic, Westchester County Medical Center, Vahalla, New York; and "Estrogen Therapy — 1982" — Donald W. Cox, M. D., Professor and Chairman, Department of Obstetrics and Gynecology, West Virginia University School of Medicine, Morgantown.

Friday Afternoon: "Recent Therapy in Hypertension"—Doctor Moser; "Depression as Seen by the Family Practitioner"—Joseph H. Talley, M. D., Family Physician, Grover, North Carolina; and "Allergy Update"—Elliot F. Ellis, M. D., Professor and Chairman, Department of Pediatrics, State University of New York, Buffalo.

Saturday Morning: (seminar on anxiety, as noted above)

Saturday Afternoon: "Office Management of Diabetes in the Elderly"— T. S. Danowski, M. D., Clinical Professor of Medicine, University of Pittsburgh; "Therapeutic and Preventive Aspects of Inflammatory Arthritis"—Edward D. Harris, Jr., M. D., Professor of Medicine, Dartmouth University College of Medicine; and "Therapeutic and Preventive Aspects of Non-inflamatory Arthritis"—Kenneth D. Brandt, M. D., Professor of Medicine, Indiana University School of Medicine.

Sunday Morning: "Use of Drugs"—Wilbur Z. Sine, M. D., Morgantown psychiatrist and Clinical Assistant Professor, Family Practice, WVU; "Recent Developments in the Treatment of Epilepsy"—Arnold D. Rothner, M. D., Chief, Section of Child Neurology, The Cleveland Clinic Foundation; and "Coronary Spasm—Calcium Antagonist"—Michael V. O'Keefe, M. D., Assistant Professor of Medicine, WVU, Morgantown.

Doctor Moser has been called one of the world's leading authorities on hypertension.

T. S. Danowski, M. D.

Chauncey H. Browning, Jr.

Doctor Danowski, who was Professor of Medicine at the University of Pittsburgh from 1956 to 1973, is a Past President of the American Diabetes Association (1965-66), and is a member of the Endocrinology and Metabolism Advisory Committee of the Food and Drug Administration.

Additional meeting details are scheduled to appear in the March issue of *The Journal*. Meanwhile, registration and other information may be obtained by calling (304) 776-1178.

Physicians Participating In Radio Series

Physicians are participating in a Charleston raido health education series, "You and Your Health."

The program is aired by WTIP Radio on Wednesdays from 12:05 to 12:30 P. M., with Nancy Hill of Charleston as hostess. Sponsors are the Kanawha Medical Society, Charleston Area Medical Center and Charleston Division, West Virginia University Medical Center.

Review A Book

The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal*, Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication.

General Urology, 10th Edition, by Donald R. Smith, M. D. 598 pages. Price $19.50. Lange Medical Publications, Los Altos, California 94022. 1981.

Lifelong Sexual Vigor: How to Avoid and Overcome Impotence, by Marvin B. Brooks, M. D., and Sally West Brooks, R.N. 249 pages. Price $12.95. Doubleday & Company, Inc., 245 Park Avenue, New York, New York 10017. 1981.

Something Hidden: A Biography of Wilder Penfield (Canadian brain surgeon), by Jefferson Lewis. 311 pages. Price $17.95. Doubleday & Company, Inc., 245 Park Avenue, New York, New York 10017. 1982.

The schedule for the next several months follows:

February 3, "What Is the Future of Artificial Blood?," Mary Taylor, M. D.; February 10, "Hypertension," Warren Point, M. D.; February 17, "Geriatric Dentistry," Saul Kamen, M. D., and February 24, "Treating Serious Accident Victims," Paige Harbough, M. D.;

March 3, "Sonography," Ronald E. Cordell, M. D.; March 10, "What Is Nuclear Medicine?," Steven A. Artz, M. D.; March 17, "Seizure Disorders in Children," Barbara Morgan, M. D.; March 24, "Hemophilia and Other Bleeding Disorders," Steve Jubelirer, M. D., and March 31, "Tuberculosis, A 'Dying Disease,'" Patrick Robinson, M. D.

Court's Opinion Limits Scope Of Collection Agencies

A recent West Virginia Supreme Court opinion will have a tremendous impact on the physician's business practices—specifically, the ability to collect *something* on bad debts turned over to a collection agency.

The principal effect of the Court's ruling in the case of *Frieson v. Isner*, No. 15109, December 18, 1981, is to disallow collection agencies from filing lawsuits on behalf of creditors on the theory that the collection agencies are engaged in the unauthorized practice of law. The opinion further stated that it doesn't matter even if the collection agency is represented by an attorney.

The alternatives remaining are: (a) hire an attorney who specializes in collections, (b) sell your debts outright to the collection agency, or (c) represent yourself.

Litigation Dismissed

A U. S. District Court action brought eight years ago by a group of chiropractors against four Blue Shield plans and the West Virginia State Medical Association has been dismissed by District Court Judge Robert Staker in Huntington after settlement of all issues in the anti-trust litigation.

The settlement was made with no payment of damages or admission of wrongdoing by the Medical Association. The Association understands that some changes in the Blue Plans' benefit packages relative to services provided by chiropractors will result from the settlement.

Judge Staker's order, entered January 11, came as the case moved toward trial.

D.C. Leader In Percentage Of Women Physicians

The District of Columbia leads the 50 states and possessions in the percentage of physician population constituted by women, the American Medical Association reported recently. Its 764 women physicians make up 18.4 per cent of all physicians within the District, proportionally the highest in the nation.

As of November, 1981, the national average for women physicians (federal and nonfederal) was 12 per cent. The individual state percentages range from 4.5 per cent (Idaho) to 16.7 per cent (New York). The West Virginia average was 10.9 per cent.

States with less than seven per cent women physicians are Idaho, Montana, North Dakota, South Dakota, Nevada, Utah and Wyoming. The leaders, all with more than 14 per cent women physicians, are Delaware, Maryland, Massachusetts, New Jersey, Illinois and New York.

Among the highest on the list were the U.S. possessions, including Puerto Rico (15 per cent), the Pacific Islands (15.6 per cent) and the Virgin Islands (17.9 per cent).

Interestingly, when the figures are broken down to include only residents-in-training, the Virgin Islands fall to last on the list; of the three residents-in-training counted there, not one is a woman. But the Pacific Islands retain their leading position with 100 per cent—or both—of the two residents-in-training counted there being women.

Residents-In-Training

State percentages for residents - in - training range from 11.7 per cent (North Dakota) to 27.7 per cent (Delaware). States with less than 16 per cent women residents-in-training are Louisiana, Florida, Montana, Alabama, Vermont and North Dakota. The West Virginia average is 17.9 per cent.

States with greater than 25 per cent women residents-in-training are Connecticut, New Hampshire, Illinois, Wyoming, Massachusetts, Rhode Island and Delaware. Higher still are Puerto Rico (30.3 per cent) and the District of Columbia (31.3 per cent).

The current national average for women residents is 22 per cent; for women medical students, the national average is 27.5 per cent. According to a report by the AMA's Committee on Women Physicians in Organized Medicine, increasing enrollment of women in medical schools could swell the national percentage of women physicians to 33 per cent within this decade.

Medical Meetings

Feb. 3-7—Am. College of Psychiatrists, Orlando, Fla.

Feb. 13—Critical Care Conference (MU), Huntington.

Feb. 25-28—AMA National Leadership Conference, Chicago.

March 1-3—Southeastern Surgical Conference, Bal Harbour, Fla.

March 1-3—NIH Consensus Development Conference on Total Hip Joint Replacement, Bethesda, MD.

March 3-8—International Conference of the Assn. for Children & Adults With Learning Disabilities, Chicago.

March 4-6—Am. College of Obstetricians & Gynecologists, Big Sky, MT.

March 5—Impaired Health Care Professionals (Am. Society of Law & Med., MI State Med. Society, etc.), Detroit.

March 5-7 — Cardiovascular Disease Epidemiology (Council on Epidemiology, Am. Heart Assn.; & National Heart, Lung & Blood Institute), San Antonio.

March 5-10—Am. Society of Abdominal Surgeons, Las Vegas.

March 17-20—Neurosurgical Society of Am., Marco Island, Fla.

March 20-25—Am. Academy of Pediatrics, Honolulu.

March 21-25—Am. Fertility Society, Las Vegas.

April 14-16—Am. Society for Artificial Internal Organs, Inc., Chicago.

April 16-18—WV Chapter, AAFP, Morgantown.

April 22-23—WV Chapter, Am. Academy of Pediatrics, Morgantown.

April 25-27 — Am. Society of Clinical Oncology, St. Louis.

April 25-29—Am. College of Cardiology, Atlanta.

April 26-29—Am. College of Obstetricians & Gynecologists, Dallas.

May 2-5—WV Academy of Ophthalmol. & Otolaryngol., White Sulphur Springs.

May 5-6—Am. Society for Head & Neck Surgery, Palm Beach, Fla.

May 10-14 — Am. Roentgen Ray Society, New Orleans.

May 13-16 — Federation of State Medical Boards, New Orleans.

May 16-20—Am. Urological Assn., Kansas City, Mo.

May 21-22 — Phacoemulsification-Extracapsular/Posterior Chamber Implant (Blaydes Foundation), Bluefield.

June 13-17 — Annual Meeting of AMA House of Delegates, Chicago.

Aug. 26-28—115th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Sept. 30 - Oct. 2 — Women's Health Conference (WVU), Morgantown.

Oct. 4-7—AAFP, San Francisco.

Oct. 30-Nov. 2—Southern Med. Assn., Atlanta.

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WVU Medical Center
–News–

Compiled from material furnished by the Medical Center News Service, Morgantown, W. Va.

Better Choices In Childbirth Drugs Being Pinpointed

Through the use of pharmacokinetics, researchers at WVU Medical Center are beginning to find why one local anesthetic may be better than another for use during childbirth.

Pharmacokinetics is the study of the time needed for a drug's absorption, distribution, localization in tissues, metabolism and excretion. It also studies the relationship of these processes to the drug's therapeutic or adverse effects.

These processes are being examined by Ronald L. Kennedy, M. D., Professor of Anesthesiology, and Richard P. Miller, Ph.D., Associate Professor of Pharmacy. Their research associates are Dinesh Doshi, M. D., Assistant Professor of Anesthesiology, and Donald L. Heald, graduate student in pharmacy.

The two-year, interdisciplinary study is being funded with $122,790 from the National Institute of Child Health and Human Development.

Using pregnant ewes as their animal models, Doctors Kennedy and Miller are coming up with basic information on the uptake and distribution of three different local anesthetics in the unborn.

Bupivacaine Better Choice

Although final data still are being analyzed, Doctor Miller said it appears that the drug bupivacaine may be a better choice for use in childbirth than either lidocaine or etidocaine.

Both lidocaine and bupivacaine are widely used both for paracervical and pudendal block. Etidocaine is not used extensively for obstetrics in this country.

"These three anesthetics are from a family of compounds which are amides," Doctor Miller explained. "Lidocaine is the prototype of the series. Because of its popularity as a local anesthetic, other similar compounds with different attributes were developed. Bupivacaine and etidocaine are longer acting than lidocaine.

"The drugs differ in their physical-chemical characteristics. Some are more highly lipid (fat) soluble than others. Because of the solubility, they will be more readily absorbed since membranes are lipid-like structures.

"Some are ionized to different extents. The more highly ionized a compound, the less likely it is to cross a membrane, in this case the placental membrane.

"Each compound is bound to blood protein to a different extent. Bupivacaine and etidocaine are more highly protein-bound than lidocaine. Therefore, there is less free drug available to cross the placental membrane."

Where To Put Mental Health Facilities Article Topic

Locating mental health facilities with other human service agencies may be the best way to overcome public opposition to having such facilities as neighbors, according to a WVU researcher.

". . . It may be possible to reduce opposition to mental health facilities by 'co-locating' them with other human service agencies—such as health clinics and planned parenthood centers." wrote Robert Q. Hanham, Ph.D., research associate with the WVU Regional Research Institute.

"Or it may be possible to achieve the same thing by locating them within larger facilities—such as shopping centers and general hospitals.

"The advantages of such strategies are obvious in that the overall package would be less noxious, and at the same time many clients would benefit from a spatial concentration of human service agencies."

Doctor Hanham summarized his findings in an article that appeared in Professional Geographer, which was co-authored by Christopher J. Smith of the State University of New York.

Single reprints of the article may be obtained by writing the Regional Research Institute, West Virginia University, Morgantown 26506.

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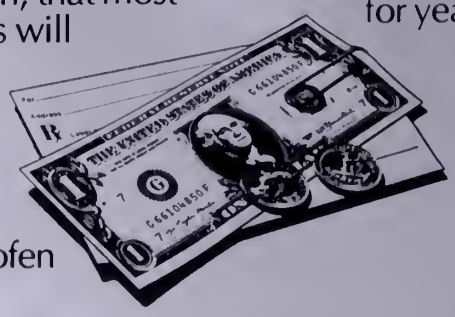

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INDICATIONS AND USAGE: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in the long-term management of these diseases. Safety and effectiveness have not been established for Functional Class IV rheumatoid arthritis.

Relief of mild to moderate pain.

CONTRAINDICATIONS: Patients hypersensitive to ibuprofen, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory drugs (see WARNINGS).

WARNINGS: Anaphylactoid reactions have occurred in patients hypersensitive to aspirin (see CONTRAINDICATIONS). Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Peptic ulceration, perforation, or gastrointestinal bleeding can end fatally; however, an association has not been established. Rufen should be given under close supervision to patients with a history of upper gastrointestinal tract disease, and only after consulting the ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be attempted. If Rufen must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

PRECAUTIONS: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If developed, discontinue Rufen and administer an ophthalmologic examination.

Fluid retention and edema have been associated with Rufen; caution should be used in patients with a history of cardiac decompensation.

Rufen can inhibit platelet aggregation and prolong bleeding time. Use with caution in patients with intrinsic coagulation defects and those taking anticoagulants.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy, this therapy should be tapered slowly when adding Rufen.

DRUG INTERACTION: *Coumarin-type anticoagulants.* The physician should be cautious when administering Rufen to patients on anticoagulants.

Aspirin. Concomitant use may decrease Rufen blood levels.

PREGNANCY AND NURSING MOTHERS: Rufen should not be taken during pregnancy nor by nursing mothers.

ADVERSE REACTIONS

Incidence greater than 1%

Gastrointestinal: The most frequent adverse reaction is gastrointestinal (4% to 16%). Includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of GI tract (bloating and flatulence). **Central Nervous System:** dizziness*, headache, nervousness. **Dermatologic:** rash* (including maculopapular type), pruritus. **Special Senses:** tinnitus. **Metabolic:** decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

*Incidence 3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: gastric or duodenal ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** depression, insomnia. **Dermatologic:** vesiculobullous eruptions, urticaria, erythema multiforme. **Special Senses:** amblyopia (see PRECAUTIONS). **Hematologic:** leukopenia, decreased hemoglobin and hematocrit. **Cardiovascular:** congestive heart failure in patients with marginal cardiac function, elevated blood pressure.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** paresthesias, hallucinations, dream abnormalities. **Dermatologic:** alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** hemolytic anemia, thrombocytopenia, granulocytopenia bleeding episodes. **Allergic:** fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** gynecomastia, hypoglycemia. **Cardiovascular:** arrhythmias (Sinus tachycardia, bradycardia, and palpitations). **Renal:** decreased creatinine clearance, polyuria, azotemia.

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Thomas Memorial Hospital, a JCAH accredited community hospital presently operating 260 acute beds, is actively seeking a highly qualified physician to supervise and direct the activities of a high-volume emergency room. This position also has responsibility for supervision of house physicians, physician assistants and the coordination of the hospital employee health program. The individual selected reports directly to the President and discharges his/her role through the staff.

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Third-Party News, Views and Program Concerns

JCAH Changes Accreditation, Takes Other Actions

The Board of Commissioners of the Joint Commission on Accreditation of Hospitals (JCAH) recently voted to replace one- and two-year accreditation cycles with three-year accreditation. This decision affected surveys performed after December 31, 1981, and applies to all areas except long-term care, which will continue to award one- and two-year accreditation to qualified facilities.

When significant problems are identified, JCAH will monitor corrective action taken by the facility during the three years between accreditation surveys. Monitoring devices, such as interim-surveyor visits, requests for written information and strengthened self-surveys will be used.

A formal appeal mechanism for facilities receiving non-accreditation decisions is available, and JCAH will continue to offer consultative reviews to discuss survey findings regardless of a facility's accreditation decision.

Meanwhile, included in other JCAH news were the announcements that Drs. Alan R. Nelson of Salt Lake City, Utah, and James S. Todd of Ridgewood, New Jersey, have been appointed to represent the American Medical Association as Commissioners on the governing board of the JCAH; and that the JCAH has approved principles for the development of unified standards for hospital-based psychiatric services.

Serve on AMA Board

Both Doctors Nelson and Todd serve on the AMA Board of Trustees. They succeed AMA-JCAH Commissioners Tom E. Nesbitt, M. D., and Russell Roth, M. D. Doctor Nelson is a private practitioner of internal medicine; Doctor Todd, a general surgeon.

All psychiatric units that are part of general acute-care hospitals will be surveyed using the new hospital standards mentioned above after they have been approved and published. Free-standing psychiatric and chemical-dependency facilities may seek a survey using JCAH's *Consolidated Standards* for psychiatric facilities or the new standards which will appear in the *Accreditation Manual for Hospitals* (*AMH*). Currently, all psychiatric units with 100 or more beds are surveyed using the *Consolidated Standards.*

Drafts of the hospital-based psychiatric standards are being mailed to selected agencies, organizations and facilities for review.

Physicians 'Acted Responsibly' In Fee-Setting Practices

"Physicians have acted responsibly in their fee-setting practices during a period of unprecedented inflation," American Medical Association Executive Vice President James H. Sammons, M. D., said recently in remarks prepared for a House Commerce Subcommittee on Health hearing on the cost of medical care. "As inflation moderates, we fully expect the medical care sector to be able to achieve reductions in the rate of growth of health care costs," he added.

Doctor Sammons reviewed AMA activities aimed at cost containment, citing sponsorship of the National Commission on the Cost of Medical Care, participation in the Voluntary Effort, establishment of the Federation Cost Effectiveness Communications Network, cosponsorship of a national Conference on Utilization of Health Services scheduled for March, and development of coalitions for health care.

By streamlining office practices and reducing the number of diagnostic tests, physicians have reduced their share of the national expenditure for health care, Doctor Sammons said. Of the $247 billion spent in 1980, physician services accounted for 18.9 per cent. In 1970, physician services accounted for 19.1 per cent of the $74.4 billion spent for health care. In the same period, he pointed out, the number of physicians increased by about 36 per cent, and the Consumer Price Index measure of the general price level rose by more than 100 per cent.

Obituaries

R. EDWARD HAMRICK, M. D.

Dr. R. Edward Hamrick, Charleston general practitioner and surgeon, died on December 11, 1981, in a hospital there. He was 78.

A staff member at Kanawha Valley Memorial Hospital in Charleston for more than 50 years, he was still in practice at the time of his death.

A native of Clay, Doctor Hamrick was graduated from West Virginia University and received his M. D. degree in 1928 from the University of Louisville. He interned at Louisville City Hospital, completed a residency at the former Mountain State Hospital in Charleston, and received training in surgery at the New York Postgraduate Hospital.

Doctor Hamrick was an honorary member of the Kanawha Medical Society, West Virginia State Medical Association and American Medical Association.

Survivors include two sons, Dr. R. Edward Hamrick, Jr., of New Orleans and R. Augustus Hamrick II, a student at Marshall University; four daughters, Mrs. Emma Eisenhauer of Daytona Beach, Florida; Cecilia Hamrick of Jacksonville, Florida; Karen Hamrick, a student at the West Virginia University Law School, and Mrs. Mary Ellen Fish of Raleigh, North Carolina; and two sisters, Mrs. Retta Treanor of St. Albans and Mrs. Bobbie Bowyer of Virginia.

* * *

THOMAS W. NALE, M. D.

Dr. Thomas W. Nale of Kennett Square, Pennsylvania, formerly of Charleston and Huntington, died on December 13, 1981, in a Wilmington, Delware, hospital. He was 83.

Doctor Nale, whose specialty was occupational medicine, was a former Director (1938-41) of the Maternal and Child Hygiene Division, West Virginia Department of Health.

A native of McKeesport, Pennsylvania, he practiced in Detroit before coming to Charleston in 1937. He became a toxicologist for Union Carbide Corporation in South Charleston in 1941, moving to Carbide's New York City office in 1946. He went to Huntington in 1968, and was a former Cabell County Health Officer.

Doctor Nale retired in 1974 and moved to Kennett Square.

He was graduated from West Virginia University and received his M. D. degree in 1924 from Jefferson Medical College. He interned at Allegheny General Hospital in Pittsburgh and completed a residency at Elizabeth Steele Magee Hospital, also in Pittsburgh.

He was a retired member of the Cabell County Medical Society, West Virginia State Medical Association and American Medical Association.

Surviving are one son, Thomas W. Nale III of Kennett Square, and two sisters, Mrs. J. H. Edgell of Wilmington and Mrs. Charles Love of Charleston.

* * *

DANIEL W. DICKINSON, M. D.

Dr. Daniel W. Dickinson of Wheeling, a thoracic surgeon at the Wheeling Clinic, died November 24, 1981, in a hospital there. He was 65.

Doctor Dickinson was President of the Ohio County Medical Society in 1968-69; Past Chairman of the Wheeling Clinic staff, and Past President of the Ohio Valley Medical Center staff.

A native of Pittsburgh, Doctor Dickinson was graduated from Pennsylvania State College and received his M. D. degree in 1942 from the University of Pittsburgh. He interned at Mercy Hospital in Pittsburgh, took his residency at the University of Iowa, and returned to Mercy Hospital as a Fellow in general and thoracic surgery from 1946 to 1951.

Doctor Dickinson, who joined the Wheeling Clinic in 1951, was a surgeon from 1943 to 1945 in the U. S. Army during World War II in the Paratrooper 517th Airborne Division serving in southern Italy.

He was an honorary member of the Ohio County Medical Society, the West Virginia State Medical Association and American Medical Association; a member of the American Board of Surgery, American Board of Thoracic Surgery, Thoracic Surgical Society, and American Trudeau Tuberculosis Society; and a Fellow of the American College of Chest Physicians and the American College of Surgeons.

Survivors include the widow; two daughters, Susan Jane Dickinson, at home, and Mrs. David Cochrane of Seattle, Washington; four sons, Daniel W. Dickson, Jr., of Wheeling; James F. Dickinson of Olympia, Washington; Martin B. Dickinson of Dunbar, and John L. Dickinson of Albuquerque, New Mexico; and two sisters, Mrs. Virginia Carter of Poughkeepsie, New York, and Mrs. Dorothy Armstrong of Pittsburgh.

County Societies

CABELL

The Cabell County Medical Society met on October 8 at the Gateway Holiday Inn in Barboursville.

Dr. Anne Lawrence, endocrinologist, gave an informative talk on diabetes.

It was unanimously agreed to invite senior students from the Marshall University Medical School to Society meetings on a rotating basis, and senior students from out-of-town medical schools by letter of invitation.

New Society officers were elected.

The Society met again on November 12 at the Gateway Holiday Inn in Barboursville in a joint meeting with the Cabell County Bar Association.

The Bar Association conducted a panel discussion on points physicians must be aware of and the format to follow in court actions. The panel was well received and questions were answered.—Maurice A. Mufson, M. D., Secretary.

* * *

CENTRAL WEST VIRGINIA

The Central West Virginia Medical Society met on July 23 at the Country Road Inn in Summersville.

The guest speaker was Dr. Tony C. Majestro, Charleston orthopedist, who discussed the treatment of childhood spinal problems and county school screening programs for these problems.

A sustaining membership of $100 in the Amercian Medical Student Association was approved.—John A. Mathias, M. D., Acting Secretary.

The Society met again on October 1 at the Bicentennial Motel in Buckhannon.

Dr. John B. Markey of Charleston, President of the State Medical Association, gave an interesting discussion of the activities of the Association.

It was decided to send a letter to medical students from this area, offering to pay their dues if they were interested in being student members of the State Medical Association.

New Society officers were elected.—Joseph B. Reed, M. D., Secretary-Treasurer.

* * *

McDOWELL

The McDowell County Medical Society met on November 11 at the Stevens Clinic Hospital in Welch. Ms. Sara Bowling, dietitian at the Hospital, was the speaker. Ms. Bowling discussed the new high-carbohydrate, high-fiber diet which was designed to treat patients with diabetes mellitus.

The diet also has value in the treatment of obesity, hypertriglyceridemia, hypoglycemia and hypercholesterolemia.

New officers of the Society were elected. — Muthusami Kuppusami, M. D., Secretary.

* * *

TYGART'S VALLEY

The Tygart's Valley Medical Society met on November 19.

New officers of the Society were elected, and a Society Executive Committee was created. Also discussed was the investment of Society funds.—Michael M. Stump, M. D., Secretary.

* * *

PARKERSBURG ACADEMY

The Parkersburg Academy of Medicine met on November 11 at the Parkersburg Country Club.

The guest speaker was Dr. Larry Carey from Ohio State University. His topic was "The Acute Abdomen."

A slide presentation on the CNA Professional Liability Insurance Program was presented by Tom Auman, Director, Professional Liability Department, McDonough Caperton Shepherd Group, Charleston, and Bob Ludwig, also with McDonough. The two also answered questions on the insurance coverage.

The Academy met again on December 9 at the Parkersburg Country Club. New officers of the Academy were elected.—Ghassan A. Khalil, M. D., Secretary-Treasurer.

* * *

WESTERN

The Western Medical Society met on December 8 at Jackson General Hospital in Ripley.

A film, "Treatment of Respiratory Infections," was presented by Mel Fletcher of Pfizer Pharmaceuticals.

Changes in the bylaws of the Society were discussed and approved, and new officers were elected.—Ali H. Morad, M. D., Secretary.

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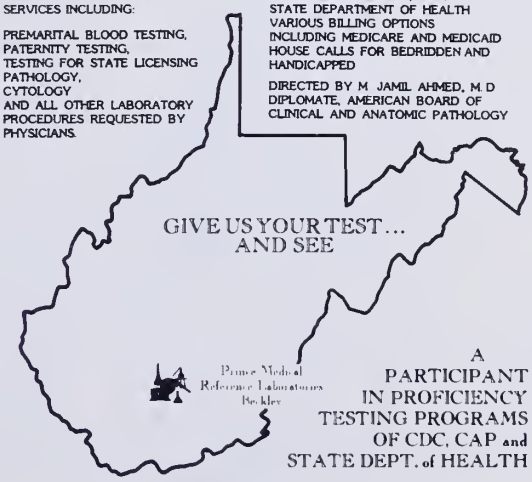

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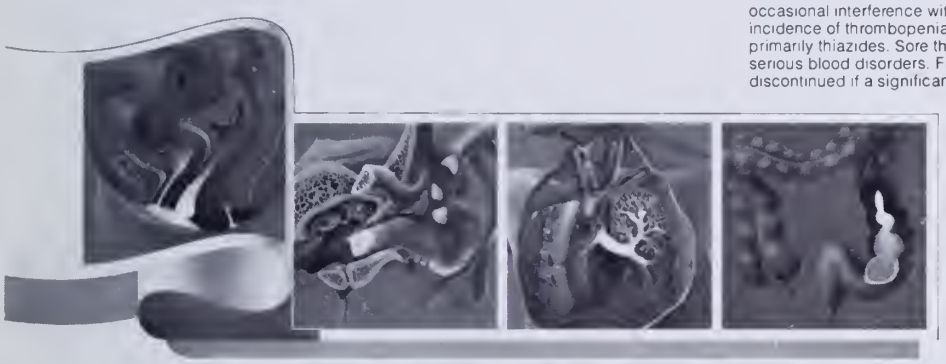
Bactrim is useful for the following infections when due to susceptible strains of indicated organisms (see indications section in summary of product information):

Expanding its usefulness in antimicrobial therapy



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effective against both major otic pathogens...with *b.i.d.* convenience

in acute exacerbations of chronic bronchitis in adults...
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in shigellosis...
faster relief of diarrhea than with ampicillin[2]

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. Limited clinical information presently available on effectiveness of treatment of otitis media with Bactrim when infection is due to ampicillin-resistant *Haemophilus influenzae*. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.

For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.

For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; patients with documented megaloblastic anemia due to folate deficiency; pregnancy at term; nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age.

Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.

Pregnancy: Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN:

Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.

Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.

For patients with renal impairment: Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.

ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS IN ADULTS:

Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 14 days.

PNEUMOCYSTIS CARINII PNEUMONITIS:

Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: *Double Strength (DS) tablets,* each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100; Prescription Paks of 20 and 28. *Tablets,* each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40. *Pediatric Suspension,* containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); cherry-flavored—bottles of 100 ml and 16 oz (1 pint). *Suspension,* containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); fruit-licorice flavored—bottles of 16 oz (1 pint).

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1. Rubin RH, Swartz MN: *N Engl J Med 303* 426-432, Aug 21, 1980. 2. Data on file, Medical Department, Hoffmann-La Roche Inc.

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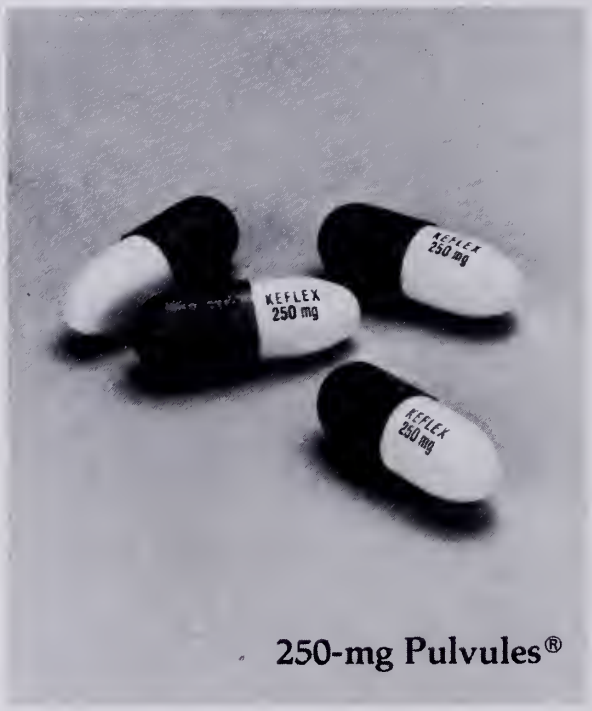

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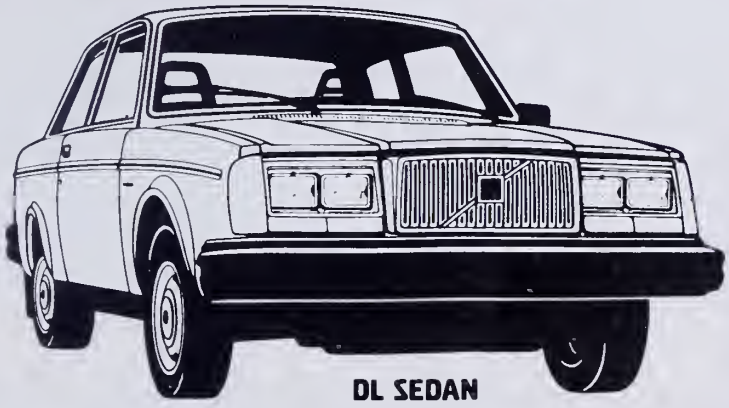

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New Medicare Guidelines for Home Oxygen

1) Arterial blood gases must be done for all home oxygen patients. These studies must be done on room air and reflect a pO_2 of 62 or below.
2) Severe Chronic Congestive Heart Failure (CHF) will be the only acceptable cardiac diagnosis that will be considered.
3) Diagnostic classifications must fall in one of the following categories:

   A) Chronic Obstructive Lung Disease
      1) Limited to Emphysema, Chronic Bronchitis, and Bronchiectasis.

   B) Chronic Interstitial Pneumonia

   C) Chronic Interstitial Pulmonary Infiltrate-type Pulmonary Diseases such as Pulmonary Fibrosis from extensive Tuberculosis, Eosinophilia Granuloma, Idiopathic Fibrosis, and Pneumoconiosis.

   D) Pulmonary Hypertension

   E) Secondary Polycythemia

4) Medicare regulations specifically prohibit the coverage of pre-set stand-by or emergency oxygen.
5) Portable oxygen units will only be considered if the person is immobile without the use of mechanical oxygen.

If you have other questions concerning Medicare regulations, please call us. Thank You.

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INDICATIONS: *Therapeutically* (as an adjunct to systemic therapy when indicated), for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection. *Prophylactically*, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: Not for use in the eyes or in the external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as a failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

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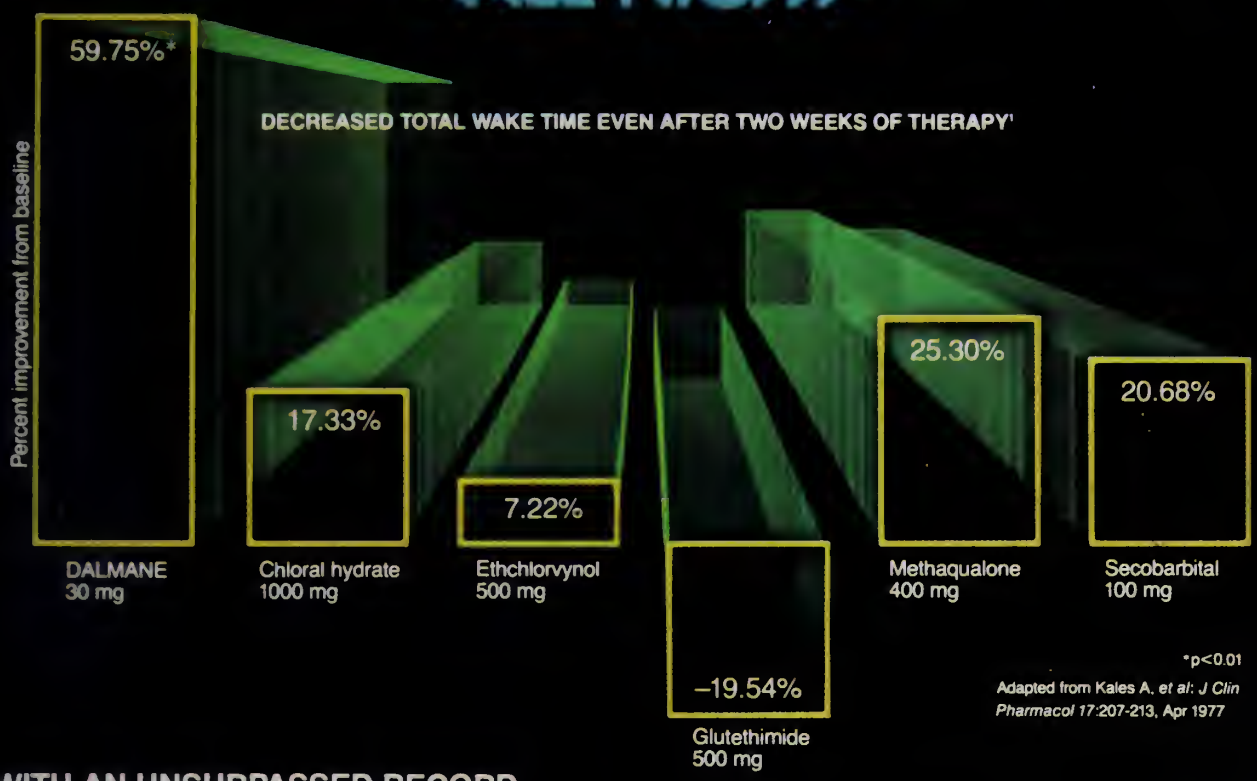

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–which can cause transient insomnia in the elderly[10]

–which can require careful monitoring in cardiovascular patients[10]

–which have strong anticholinergic effects[10]

Antihistamines

–which are *not* reliable sleep-inducing agents[11]

–which may produce stimulation instead[11]

–which have anticholinergic effects[11]

Major tranquilizers

–whose side effects may be troublesome for nonpsychotic patients[12]

–where tolerance for sedation appears rapidly[12]

Dalmane does not cause significant worsening of sleep beyond baseline levels upon discontinuation.[4]

References 1. Kales A, *et al J Clin Pharmacol 17* 207-213 Apr 1977 **2.** Data on file Medical Department, Hoffmann-La Roche Inc Nutley NJ **3.** Greenblatt DJ, Allen MD, Shader RI *Clin Pharmacol Ther 21* 355-361 Mar 1977 **4.** Kales A, *et al Clin Pharmacol Ther 18* 356-363 Sep 1975 **5.** Moore JD, Weissman L *J Clin Pharmacol 16* 241-244, May-Jun 1976 **6.** Spiegel HE Data on file, Medical Department, Hoffmann-La Roche Inc , Nutley NJ **7.** Robinson DS, Amidon EL Interaction of benzodiazepines with warfarin in man, in *The Benzodiazepines*, edited by Garattini S, Mussini E Randall LO New York, Raven Press, 1973, pp 641-646 **8.** Warfarin Study Data on file, Medical Department, Hoffmann-La Roche Inc , Nutley NJ **9.** Baldessarini RJ Drugs and the treatment of psychiatric disorders, chap 19 in Goodman and Gilman's *The Pharmacological Basis of Therapeutics* ed 6 New York, Macmillan Publishing Co Inc 1980, pp 391-447 **10.** Cole JO, Davis JM Antidepressant drugs, chap 31 2, in *Comprehensive Textbook of Psychiatry II*, edited by Freedman AM, Kaplan HI Sadock BJ, ed 2 Baltimore The Williams & Wilkins Company vol 2 1976, pp 1941-1956 **11.** Douglas WW Histamine and 5-hydroxytryptamine (serotonin) and their antagonists, chap 26, in Goodman and Gilman's *The Pharmacological Basis of Therapeutics*, ed 6 New York, Macmillan Publishing Co Inc 1980, pp 609-646 **12.** Davis JM Cole JO Antipsychotic drugs, chap 31 1 in *Comprehensive Textbook of Psychiatry II* edited by Freedman AM Kaplan HI Sadock BJ, ed 2 Baltimore, The Williams & Wilkins Company, vol 2, 1976, pp 1921-1940

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended. Repeated therapy should only be undertaken with appropriate patient evaluation.

Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity

Dosage: Individualize for maximum beneficial effect.
Adults: 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients*: 15 mg recommended initially until response is determined

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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Pfizer Laboratories Announces

THE FIRST ORAL CALCIUM CHANNEL BLOCKER FOR THE MANAGEMENT OF ANGINA PECTORIS

NEW

PROCARDIA®

(NIFEDIPINE) *Capsules 10 mg*

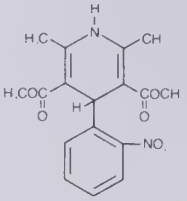
Please see PROCARDIA® *prescribing information on next page.*

PROCARDIA® CAPSULES

For Oral Use

nifedipine

DESCRIPTION: PROCARDIA (nifedipine) is an antianginal drug belonging to a new class of pharmacological agents, the calcium channel blockers. Nifedipine is 3,5-pyridinedicarboxylic acid, 1,4-dihydro-2,6-dimethyl-4-(2-nitrophenyl)-, dimethyl ester, $C_{17}H_{18}N_2O_6$, and has the structural formula:



Nifedipine is a yellow crystalline substance, practically insoluble in water but soluble in ethanol. It has a molecular weight of 346.3. PROCARDIA CAPSULES are formulated as soft gelatin capsules for oral administration each containing 10 mg nifedipine.

CLINICAL PHARMACOLOGY: PROCARDIA (nifedipine) is a calcium ion influx inhibitor (slow channel blocker or calcium ion antagonist) and inhibits the transmembrane influx of calcium ions into cardiac muscle and smooth muscle. The contractile processes of cardiac muscle and vascular smooth muscle are dependent upon the movement of extracellular calcium ions into these cells through specific ion channels. PROCARDIA selectively inhibits calcium ion influx across the cell membrane of cardiac muscle and vascular smooth muscle without changing serum calcium concentrations.

Mechanism of Action: The precise means by which this inhibition relieves angina has not been fully determined, but includes at least the following two mechanisms:

1) **Relaxation and prevention of coronary artery spasm:** PROCARDIA dilates the main coronary arteries and coronary arterioles, both in normal and ischemic regions, and is a potent inhibitor of coronary artery spasm, whether spontaneous or ergonovine-induced. This property increases myocardial oxygen delivery in patients with coronary artery spasm, and is responsible for the effectiveness of PROCARDIA in vasospastic (Prinzmetal's or variant) angina. Whether this effect plays any role in classical angina is not clear, but studies of exercise tolerance have not shown an increase in the maximum exercise rate-pressure product, a widely accepted measure of oxygen utilization. This suggests that, in general, relief of spasm or dilation of coronary arteries is not an important factor in classical angina.

2) **Reduction of oxygen utilization:** PROCARDIA regularly reduces arterial pressure at rest and at a given level of exercise by dilating peripheral arterioles and reducing the total peripheral resistance (afterload) against which the heart works. This unloading of the heart reduces myocardial energy consumption and oxygen requirements and probably accounts for the effectiveness of PROCARDIA in chronic stable angina.

Pharmacokinetics and Metabolism: PROCARDIA is rapidly and fully absorbed after oral administration. The drug is detectable in serum 10 minutes after oral administration, and peak blood levels occur in approximately 30 minutes. It is highly bound by serum proteins. PROCARDIA is extensively converted to inactive metabolites and approximately 80% of PROCARDIA and metabolites are eliminated via the kidneys. The half-life of nifedipine in plasma is approximately two hours. There is no information on the effects of renal or hepatic impairment on excretion or metabolism of PROCARDIA.

Hemodynamics: Like other slow channel blockers, PROCARDIA exerts a negative inotropic effect on isolated myocardial tissue. This is rarely, if ever, seen in intact animals or man, probably because of reflex responses to its vasodilating effects. In man, PROCARDIA causes decreased peripheral vascular resistance and a fall in systolic and diastolic pressure, usually modest (5–10 mm Hg systolic), but sometimes larger. There is usually a small increase in heart rate, a reflex response to vasodilation. Measurements of cardiac function in patients with normal ventricular function have generally found a small increase in cardiac index without major effects on ejection fraction, left ventricular end diastolic pressure (LVEDP) or volume (LVEDV). In patients with impaired ventricular function, most acute studies have shown some increase in ejection fraction and reduction in left ventricular filling pressure.

Electrophysiologic Effects: Although, like other members of its class, PROCARDIA decreases sinoatrial node function and atrioventricular conduction in isolated myocardial preparations, such effects have not been seen in studies in intact animals or in man. In formal electrophysiologic studies, predominantly in patients with normal conduction systems, PROCARDIA has had no tendency to prolong atrioventricular conduction, prolong sinus node recovery time, or slow sinus rate.

INDICATIONS AND USAGE: I. Vasospastic Angina: PROCARDIA (nifedipine) is indicated for the management of vasospastic angina confirmed by any of the following criteria: 1) classical pattern of angina at rest accompanied by ST segment elevation, 2) angina or coronary artery spasm provoked by ergonovine, or 3) angiographically demonstrated coronary artery spasm. In those patients who have had angiography, the presence of significant fixed obstructive disease is not incompatible with the diagnosis of vasospastic angina, provided that the above criteria are satisfied. PROCARDIA may also be used where the clinical presentation suggests a possible vasospastic component but where vasospasm has not been confirmed, e.g., where pain has a variable threshold on exertion or in unstable angina where electrocardiographic findings are compatible with intermittent vasospasm, or when angina is refractory to nitrates and/or adequate doses of beta blockers.

II. Chronic Stable Angina (Classical Effort-Associated Angina): PROCARDIA is indicated for the management of chronic stable angina (effort-associated angina) without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or organic nitrates or who cannot tolerate those agents.

In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in these patients are incomplete.

Controlled studies in small numbers of patients suggest concomitant use of PROCARDIA and beta-blocking agents may be beneficial in patients with chronic stable angina, but available information is not sufficient to predict with confidence the effects of concurrent treatment, especially in patients with compromised left ventricular function or cardiac conduction abnormalities. When introducing such concomitant therapy, care must be taken to monitor blood pressure closely since severe hypotension can occur from the combined effects of the drugs. (See Warnings.)

CONTRAINDICATIONS: Known hypersensitivity reaction to PROCARDIA.

WARNINGS: Excessive Hypotension: Although in most patients, the hypotensive effect of PROCARDIA is modest and well tolerated, occasional patients have had excessive and poorly tolerated hypotension. These responses have usually occurred during initial titration or at the time of subsequent upward dosage adjustment, and may be more likely in patients on concomitant beta blockers.

Increased Angina/Beta Blocker Withdrawal: Occasional patients have developed well documented increased frequency, duration or severity of angina on starting PROCARDIA or at the time of dosage increases. The mechanism of this response is not established but could result from decreased coronary perfusion associated with decreased diastolic pressure with increased heart rate, or from increased demand resulting from increased heart rate alone.

Patients recently withdrawn from beta blockers may develop a withdrawal syndrome with increased angina, probably related to increased sensitivity to catecholamines. Initiation of PROCARDIA treatment will not prevent this occurrence and might be expected to exacerbate it by provoking reflex catecholamine release. There have been occasional reports of increased angina in a setting of beta blocker withdrawal and PROCARDIA initiation. It is important to taper beta blockers if possible, rather than stopping them abruptly before beginning PROCARDIA.

Congestive Heart Failure: Rarely, patients usually receiving a beta blocker have developed heart failure after beginning PROCARDIA. Patients with tight aortic stenosis may be at greater risk for such an event, as the unloading effect of PROCARDIA would be expected to be of less benefit to these patients, owing to their fixed impedance to flow across the aortic valve.

PRECAUTIONS: General: Hypotension: Because PROCARDIA decreases peripheral vascular resistance, careful monitoring of blood pressure during the initial administration and titration of PROCARDIA is suggested. Close observation is especially recommended for patients already taking medications that are known to lower blood pressure. See Warnings.

Peripheral edema: Mild to moderate peripheral edema, typically associated with arterial vasodilation and not due to left ventricular dysfunction, occurs in about one in ten patients treated with PROCARDIA. This edema occurs primarily in the lower extremities and usually responds to diuretic therapy. With patients whose angina is complicated by congestive heart failure, care should be taken to differentiate this peripheral edema from the effects of increasing left ventricular dysfunction.

Drug interactions: Beta-adrenergic blocking agents: See Indications and Warnings. Experience in over 1400 patients in a non-comparative clinical trial has shown that concomitant administration of PROCARDIA and beta-blocking agents is usually well tolerated, but there have been occasional literature reports suggesting that the combination may increase the likelihood of congestive heart failure, severe hypotension or exacerbation of angina.

Long-acting nitrates: PROCARDIA may be safely co-administered with nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.

Carcinogenesis, mutagenesis, impairment of fertility: Nifedipine was administered orally to rats for two years and was not shown to be carcinogenic. When given to rats prior to mating, nifedipine caused reduced fertility at a dose approximately 30 times the maximum recommended human dose. *In vivo* mutagenicity studies were negative.

Pregnancy: Pregnancy category C. Nifedipine has been shown to be teratogenic in rats when given in doses 30 times the maximum recommended human dose. Nifedipine was embryotoxic (increased fetal resorptions, decreased fetal weight, increased stunted forms, increased fetal deaths, decreased neonatal survival) in rats, mice and rabbits at doses of from 3 to 10 times the maximum recommended human dose. In pregnant monkeys, doses 2/3 and twice the maximum recommended human dose resulted in small placentas and underdeveloped chorionic villi. In rats, doses three times the maximum human dose and higher caused prolongation of pregnancy. There are no adequate and well-controlled studies in pregnant women. PROCARDIA should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

ADVERSE REACTIONS: In multiple-dose U.S. and foreign-controlled studies in which adverse reactions were reported spontaneously, adverse effects were frequent but generally not serious and rarely required discontinuation of therapy or dosage adjustment. Most were expected consequences of the vasodilator effects of PROCARDIA.

Adverse Effect	PROCARDIA (%) (N = 226)	Placebo (%) (N = 235)
Dizziness, light-headedness, giddiness	27	15
Flushing, heat sensation	25	8
Headache	23	20
Weakness	12	10
Nausea, heartburn	11	8
Muscle cramps, tremor	8	3
Peripheral edema	7	1
Nervousness, mood changes	7	4
Palpitation	7	5
Dyspnea, cough, wheezing	6	3
Nasal congestion, sore throat	6	8

There is also a large uncontrolled experience in over 2100 patients in the United States. Most of the patients had vasospastic or resistant angina pectoris, and about half had concomitant treatment with beta-adrenergic blocking agents. The most common adverse events were the same ones seen in the controlled trials, with dizziness or light-headedness, peripheral edema, nausea, weakness, headache and flushing each occurring in about 10% of patients, transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%. Syncopal episodes did not recur with reduction in the dose of PROCARDIA or concomitant antianginal medication. Very rarely, introduction of PROCARDIA therapy was associated with an increase in anginal pain, possibly due to associated hypotension.

Several of these side effects appear to be dose related. Peripheral edema occurred in about one in 25 patients at doses less than 60 mg per day and in about one patient in eight at 120 mg per day or more. Transient hypotension, generally of mild to moderate severity and seldom requiring discontinuation of therapy, occurred in one of 50 patients at less than 60 mg per day and in one of 20 patients at 120 mg per day or more.

In addition, 2% or fewer of patients reported the following: **Respiratory:** Nasal and chest congestion, shortness of breath. **Gastrointestinal:** Diarrhea, constipation, cramps, flatulence. **Musculoskeletal:** Inflammation, joint stiffness, muscle cramps. **CNS:** Shakiness, nervousness, jitteriness, sleep disturbances, blurred vision, difficulties in balance. **Other:** Dermatitis, pruritus, urticaria, fever, sweating, chills, sexual difficulties.

In addition, more serious adverse events were observed, not readily distinguishable from the natural history of the disease in these patients. It remains possible, however, that some or many of these events were drug related. Myocardial infarction occurred in about 4% of patients and congestive heart failure or pulmonary edema in about 2%. Ventricular arrhythmias or conduction disturbances each occurred in fewer than 0.5% of patients.

In a subgroup of over 1000 patients receiving PROCARDIA with concomitant beta blocker therapy, the pattern and incidence of adverse experiences was not different from that of the entire group of PROCARDIA treated patients (see **Precautions**).

In a subgroup of patients with a diagnosis of congestive heart failure as well as angina, dizziness or light-headedness, peripheral edema, headache or flushing each occurred in one in eight patients. Hypotension occurred in about one in 20 patients. Syncope occurred in approximately one patient in 250. Myocardial infarction or symptoms of congestive heart failure each occurred in about one patient in 15. Atrial or ventricular dysrhythmias each occurred in about one patient in 150.

Laboratory tests: Rare, mild to moderate, transient elevations of enzymes such as alkaline phosphatase, CK, LDH, SGOT, and SGPT have been noted, and a single incident of significantly elevated transaminases and alkaline phosphatase was seen in a patient with a history of gall bladder disease after about eleven months of nifedipine therapy. The relationship to PROCARDIA therapy is uncertain. These laboratory abnormalities have already been associated with clinical symptoms. Cholestasis, possibly due to PROCARDIA therapy, has been reported twice in the extensive world literature.

OVERDOSAGE: Although there is no well documented experience with PROCARDIA overdosage, available data suggest that gross overdosage could result in excessive peripheral vasodilation with subsequent marked and probably prolonged systemic hypotension. Clinically significant hypotension due to PROCARDIA overdosage calls for active cardiovascular support including monitoring of cardiac and respiratory function, elevation of extremities, and attention to circulating fluid volume and urine output. A vasoconstrictor (such as norepinephrine) may be helpful in restoring vascular tone and blood pressure, provided that there is no contraindication to its use. Clearance of PROCARDIA would be expected to be prolonged in patients with impaired liver function. Since PROCARDIA is highly protein-bound, dialysis is not likely to be of benefit.

DOSAGE AND ADMINISTRATION: The dosage of PROCARDIA needed to suppress angina and that can be tolerated by the patient must be established by titration. Excessive doses can result in hypotension.

The starting dose is one 10 mg capsule, swallowed whole, 3 times day. The usual effective dose range is 10–20 mg three times daily. Some patients, especially those with evidence of coronary artery spasm, respond only to higher doses, more frequent administration, or both. In such patients, doses of 20–30 mg three or four times daily may be effective. Doses above 120 mg daily are rarely necessary. More than 180 mg per day is not recommended.

In most cases, PROCARDIA titration should proceed over a 7–14 day period so that the physician can assess the response to each dose level and monitor the blood pressure before proceeding to higher doses.

If symptoms so warrant, titration may proceed more rapidly provided that the patient is assessed frequently. Based on the patient's physical activity level, attack frequency, and sublingual nitroglycerin consumption, the dose of PROCARDIA may be increased from 10 mg t.i.d. to 20 mg t.i.d. and then to 30 mg t.i.d. over a three-day period.

In hospitalized patients under close observation, the dose may be increased in 10 mg increments over four to six-hour periods as required to control pain and arrhythmias due to ischemia. A single dose should rarely exceed 30 mg.

No "rebound effect" has been observed upon discontinuation of PROCARDIA. However, if discontinuation of PROCARDIA is necessary, sound clinical practice suggests that the dosage should be decreased gradually with close physician supervision.

Co-Administration with Other Antianginal Drugs: Sublingual nitroglycerin may be taken as required for the control of acute manifestations of angina, particularly during PROCARDIA titration. See **Precautions, Drug Interactions** for information on co-administration of PROCARDIA with beta blockers or long-acting nitrates.

HOW SUPPLIED: Each orange, soft gelatin PROCARDIA Capsule contains 10 mg of nifedipine. PROCARDIA Capsules are supplied in amber glass bottles of 100 capsules (NDC 0069-2600-66).

The capsules should be protected from light and moisture and stored at controlled room temperature 59° to 77°F (15° to 25°C) in the manufacturer's original container.

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DRAMATIC NEW CLINICAL PROOF*

In the treatment of impetigo–

- **100% cure rate with Tegopen®** (cloxacillin sodium)
- **only a 60% cure rate with penicillin V-K**

As seen on admission

After one week of penicillin V-K therapy

Two weeks after initiation of TEGOPEN therapy

Treatment failure was judged to have occurred when lesions increased in size and/or number during the initial week of treatment with penicillin V-K. *No* treatment failures occurred with Tegopen.

*Data on file, Bristol Laboratories.

Brief Summary of Prescribing Information

TEGOPEN®
(cloxacillin sodium)
Capsules and Oral Solution

For complete information, consult Official Package Circular. (12) 9/11/75

INDICATIONS:

Although the principal indication for cloxacillin sodium is in the treatment of infections due to penicillinase-producing staphylococci, it may be used to initiate therapy in such patients in whom a staphylococcal infection is suspected. (See Important Note below.)

Bacteriologic studies to determine the causative organisms and their sensitivity to cloxacillin sodium should be performed.

IMPORTANT NOTE

When it is judged necessary that treatment be initiated before definitive culture and sensitivity results are known, the choice of cloxacillin sodium should take into consideration the fact that it has been shown to be effective only in the treatment of infections caused by pneumococci, Group A beta-hemolytic streptococci, and penicillin G-resistant and penicillin G-sensitive staphylococci. If the bacteriology report later indicates the infection is due to an organism other than a penicillin G-resistant staphylococcus sensitive to cloxacillin sodium, the physician is advised to continue therapy with a drug other than cloxacillin sodium or any other penicillinase-resistant semi-synthetic penicillin.

Recent studies have reported that the percentage of staphylococcal isolates resistant to penicillin G outside the hospital is increasing, approximating the high percentage of resistant staphylococcal isolates found in the hospital. For this reason, it is recommended that a penicillinase-resistant penicillin be used as initial therapy for any suspected staphylococcal infection until culture and sensitivity results are known.

Cloxacillin sodium is a compound that acts through a mechanism similar to that of methicillin against penicillin G-resistant staphylococci. Strains of staphylococci resistant to methicillin have existed in nature and it is known that the number of these strains reported has been increasing. Such strains of staphylococci have been capable of producing serious disease, in some instances resulting in fatality. Because of this, there is concern that widespread use of the penicillinase-resistant penicillins may result in the appearance of an increasing number of staphylococcal strains which are resistant to these penicillins.

Methicillin-resistant strains are almost always resistant to all other penicillinase-resistant penicillins (cross-resistance with cephalosporin derivatives also occurs frequently). Resistance to any penicillinase-resistant penicillin should be interpreted as evidence of clinical resistance to all, in spite of the fact that minor variations in *in vitro* sensitivity may be encountered when more than one penicillinase-resistant penicillin is tested against the same strain of staphylococcus.

CONTRAINDICATIONS:

A history of a previous hypersensitivity reaction to any of the penicillins is a contraindication.

RESULTS OF ORAL THERAPY revealed a high percentage of treatment failures with penicillin V potassium, but *no* failures with Tegopen.

		Given Tegopen® *(cloxacillin sodium)*	Given *penicillin V-K*
Staphylococcus aureus	(78 patients)	39	39
Returned to clinic at one week		29†	38†
Treatment failure at one week		0	18 (47.4%)
Staphylococcus aureus and *Streptococcus pyogenes*	(9 patients)	4	5
Returned to clinic at one week		4	5
Treatment failure at one week		0	2 (40%)
No initial bacterial growth	(14 patients)	9	5
All 14 healed, regardless of which antibiotic was administered.			
Beta-hemolytic *Streptococcus*	(1 patient)	0	1
TOTALS:	**102 patients**	**52 patients**	**50 patients**

†Eleven patients did not return for their one-week checkup These were all called by telephone, and their families reported the lesions had healed. One patient was dropped from the study, early, because of adverse reaction to medication.

STUDY: DESCRIPTION/PROTOCOL

- 102 nonselected subjects, with initial bacteriology as follows: 77% *Staphylococcus aureus*, 9% mixed *Staphylococcus aureus* and *Streptococcus pyogenes*, and 1% beta-hemolytic *Streptococcus*.†
- All patients were given randomized therapy—Tegopen capsules or oral solution, or penicillin V-K tablets or oral solution, in recommended dosages according to body weight.
- All patients were evaluated after one week's therapy. If there was no improvement, therapy was switched to the other antibiotic. The "other antibiotic" proved to be Tegopen 100% of the time because no treatment failures had occurred with Tegopen.
- A final assessment of progress was made two weeks after initiation of Tegopen therapy.

†The remainder, to equal 100%, consisted of 14 patients (13%) who exhibited no initial bacterial growth. These 14 were all healed, whether given Tegopen or penicillin V-K.

TEGOPEN®
(cloxacillin sodium)
–effective therapy for staph infections of the skin and skin structures

WARNING:
Serious and occasionally fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin therapy. Although anaphylaxis is more frequent following parenteral therapy it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with a history of sensitivity to multiple allergens.

There have been well documented reports of individuals with a history of penicillin hypersensitivity reactions who have experienced severe hypersensitivity reactions when treated with a cephalosporin. Before therapy with a penicillin, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, and other allergens. If an allergic reaction occurs, the drug should be discontinued and the patient treated with the usual agents, e.g., pressor amines, antihistamines, and corticosteroids.

Safety for use in pregnancy has not been established.

PRECAUTIONS:
The possibility of the occurrence of superinfections with mycotic organisms or other pathogens should be kept in mind when using this compound, as with other antibiotics. If superinfection occurs during therapy, appropriate measures should be taken.

As with any potent drug, periodic assessment of organ system function, including renal, hepatic, and hematopoietic, should be made during long-term therapy.

ADVERSE REACTIONS:
Gastrointestinal disturbances, such as nausea, epigastric discomfort, flatulence, and loose stools, have been noted by some patients. Mildly elevated SGOT levels (less than 100 units) have been reported in a few patients for whom pretherapeutic determinations were not made. Skin rashes and allergic symptoms, including wheezing and sneezing, have occasionally been encountered. Eosinophilia, with or without overt allergic manifestations, has been noted in some patients during therapy.

USUAL DOSAGE:
Adults: 250 mg. q.6h.

Children: 50 mg./Kg./day in equally divided doses q.6h. Children weighing more than 20 Kg. should be given the adult dose. Administer on empty stomach for maximum absorption.

N.B.: INFECTIONS CAUSED BY GROUP A BETA-HEMOLYTIC STREPTOCOCCI SHOULD BE TREATED FOR AT LEAST 10 DAYS TO HELP PREVENT THE OCCURRENCE OF ACUTE RHEUMATIC FEVER OR ACUTE GLOMERULONEPHRITIS.

SUPPLIED:
Capsules—250 mg. in bottles of 100. 500 mg. in bottles of 100.
Oral Solution—125 mg./5 ml. in 100 ml. and 200 ml. bottles.

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Bristol Laboratories
Division of Bristol-Myers Company
Syracuse, New York 13201

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THE PATIENT THINKS HE HAS HEART TROUBLE...

...YOU KNOW IT'S REALLY ANXIETY SYMPTOMS

His presenting symptoms: palpitations, chest pain, chronic exhaustion and occasional difficulties in breathing. Good reason for concern. A complete workup uncovers no organic dysfunction, but it *does* reveal excessively high levels of anxiety and apprehension.

For rapid relief you prescribe Valium (diazepam/Roche)

At times like this, Valium (diazepam/Roche) can be a potent therapeutic ally. It works promptly. Within just a few hours, the patient begins to feel calmer. And in a few days, anxiety relief not only becomes more pronounced but a noticeable reduction in anxiety-generated somatic symptoms also occurs.

Equally important, Valium is generally well tolerated. Side reactions more serious than drowsiness, ataxia and fatigue are rare. Patients should, of course, be cautioned against driving or drinking alcohol while on Valium therapy. Periodic reassessment of the need for antianxiety medication should also be performed.

VALIUM® Ⓘⓥ

diazepam/Roche

2-mg, 5-mg, 10-mg scored tablets

BECAUSE YOU'RE CONVINCED THE PATIENT NEEDS IT

ROCHE®

Please see summary of product information on the following page.

VALIUM®(diazepam/Roche)

Before prescribing, please consult complete product information, a summary of which follows:
Indications: Management of anxiety disorders, or short-term relief of symptoms of anxiety. Anxiety or tension associated with the stress of everyday life usually does not require treatment with an anxiolytic. Symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).
The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.
Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.
Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.
***Usage in Pregnancy*: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**
Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed, drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.
The clearance of Valium and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.
Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported, should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.
Dosage: Individualize for maximum beneficial effect. *Adults*. Anxiety disorders, symptoms of anxiety, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients*: 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children*. 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).
How Supplied: For oral administration, Valium scored tablets—2 mg, white; 5 mg, yellow; 10 mg, blue—bottles of 100* and 500,* Prescription Paks of 50, available in trays of 10 * Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25,† and in boxes containing 10 strips of 10 †

*Supplied by Roche Products Inc., Manati, Puerto Rico 00701
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*Reference: 1981/82 *American Druggist Blue Book*

LP-042 1/82 Printed in U.S.A.

SU-TON®

Liquid Tonic

A Tonic for Geriatric Patients

A pleasant tasting tonic containing iron, vitamins, minerals, and an analeptic. Ideal for those who may benefit from vitamin deficiency prevention. Just one tablespoon before each meal.

DESCRIPTION Forty-five milliliters of SU-TON contains the following ingredients. Pentylenetetrazol, 30 mg • Niacin, 50 mg • Vitamin B-1, 10 mg • Vitamin B-2, 5 mg • Vitamin B-6, 1 mg • Vitamin B-12, 3 mcg • Manganese (as Manganese Sulfate), 1 mg • Magnesium (as Magnesium Sulfate), 2 mg • Zinc (as Zinc Sulfate), 1 mg • Iron (as Ferric Pyrophosphate, Soluble), 22 mg • Alcohol, 18%

INDICATIONS AND USAGE SU-TON contains pentylenetetrazol which may be helpful in the older patient as an analeptic agent when mental confusion and memory defects are present. SU-TON also contains vitamins, trace minerals, and iron, for those patients who may benefit by preventing the development of a deficiency.

CONTRAINDICATIONS Epilepsy, convulsive disorders or known history of sensitivity to any of the listed active ingredients.

WARNINGS The safety of this preparation during pregnancy and lactation has not been established. Use of this drug requires that the physician evaluate the potential benefits of the drug against any possible hazard to the mother and child.

PRECAUTIONS Although there are no absolute contraindications to pentylenetetrazol, it should be used with caution in epileptic patients or those known to have a low convulsive threshold or a focal brain lesion. Caution should be exercised when treating patients with high doses of SU-TON who have heart disease. While pentylenetetrazol does not act directly on the myocardium; the results from central vagal stimulation could cause bradycardia.

ADVERSE REACTIONS Pentylenetetrazol in high doses may produce toxic symptoms typical of central nervous system stimulants, which act on the higher motor centers and the spinal cord. Convulsions resulting from this drug are spontaneous and are not induced by external stimuli. They usually last for several minutes and are followed by profound depression and respiratory paralysis. Death has been reported from the ingestion of 10 grams of pentylenetetrazol.

DRUG ABUSE Drug dependence has not been reported with SU-TON.

OVERDOSAGE Signs and symptoms of acute overdose may be due principally from overstimulation of the central nervous system and from excessive vasodilatation with resulting autonomic nervous system imbalance. The symptoms may include the following: vomiting, agitation, tremors, hyperreflexia, sweating, confusion, hallucinations, headache, hyperpyrexia, tachycardia. Treatment consists of appropriate supportive measures. If signs and symptoms are not too severe and the patient is conscious, gastric evacuation may be accomplished by induction of emesis or gastric lavage. Intensive care must be provided to maintain adequate circulation and respiratory exchange.

DOSAGE AND ADMINISTRATION One tablespoonful (15 ml) 3 times a day 20–30 minutes before meals. This drug is not for use in children under 12 years of age.

HOW SUPPLIED Bottles of 473 ml (16 fl. oz.) NDC 0524-1015-16

Federal law prohibits dispensing without prescription February 1982

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Cyclapen®-W produces a significantly lower incidence of the most common side effect, diarrhea.[2]

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Rapid onset of action with fewer side effects.

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†Due to susceptible organisms.
1. Ginsburg CM, McCracken GH Jr, Zweighaft TC, Clahsen JC: Comparative pharmacokinetics of cyclacillin and amoxicillin in infants and children. *Antimicrob Ag Chemother* 19:1086-1088 (June) 1981.
2. Multicenter trials. Data to be published.

See important information on page after next.

Compared to ampicillin

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Cyclapen®-W (cyclacillin) produces peak serum concentrations* almost four times higher and over one hour earlier.[3]

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(cyclacillin) Tablets/Suspension

Rapid onset of action with fewer side effects.

*Rapidly excreted unchanged in urine. Clinical efficacy may not always correlate with blood levels.
†Due to susceptible organisms.
3. Data on file. Wyeth Laboratories.
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See important information on adjoining page.

Wyeth Laboratories
Philadelphia, Pa 19101

Cyclapen®-W (cyclacillin)

Indications
Cyclacillin has less in vitro activity than other drugs in the ampicillin class and its use should be confined to these indications: Treatment of the following infections:

RESPIRATORY TRACT
Tonsillitis and pharyngitis caused by Group A beta-hemolytic streptococci
Bronchitis and pneumonia caused by S. pneumoniae (formerly D. pneumoniae)
Otitis media caused by S. pneumoniae (formerly D. pneumoniae) and *H. influenzae*
Acute exacerbation of chronic bronchitis caused by *H. influenzae**
*Though clinical improvement has been shown, bacteriologic cures cannot be expected in all patients with chronic respiratory disease due to *H. influenzae*.

SKIN AND SKIN STRUCTURES (integumentary) infections caused by Group A beta-hemolytic streptococci and staphylococci, non-penicillinase producers.

URINARY TRACT INFECTIONS caused by *E. coli* and *P. mirabilis*. (This drug should not be used in any *E. coli* and *P. mirabilis* infections other than urinary tract.)

NOTE: Perform cultures and susceptibility tests initially and during treatment to monitor effectiveness of therapy and susceptibility of bacteria. Therapy may be instituted prior to results of sensitivity testing.

Contraindications Contraindicated in individuals with history of an allergic reaction to penicillins.

Warnings Cyclacillin should only be prescribed for the indications listed herein.

Cyclacillin has less in vitro activity than other drugs of the ampicillin class. However, clinical trials demonstrated it is efficacious for recommended indications.

Serious and occasional fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin. Although anaphylaxis is more frequent following parenteral use, it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with history of sensitivity to multiple allergens. There are reports of patients with history of penicillin hypersensitivity reactions who experienced severe hypersensitivity reactions when treated with a cephalosporin. Before penicillin therapy, carefully inquire about previous hypersensitivity reactions to penicillins, cephalosporins and other allergens. If allergic reaction occurs, discontinue drug and initiate appropriate therapy. Serious anaphylactoid reactions require immediate emergency treatment with epinephrine. Oxygen, I.V. steroids, airway management, including intubation, should also be administered as indicated.

Precautions Prolonged use of antibiotics may promote overgrowth of nonsusceptible organisms. If superinfection occurs, take appropriate measures.

PREGNANCY: Pregnancy Category B. Reproduction studies performed in mice and rats at doses up to 10 times the human dose revealed no evidence of impaired fertility or harm to the fetus due to cyclacillin. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, use this drug during pregnancy only if clearly needed.

NURSING MOTHERS: It is not known whether this drug is excreted in human milk. Because many drugs are, exercise caution when cyclacillin is given to a nursing woman.

Adverse Reactions Oral cyclacillin is generally well tolerated. As with other penicillins, untoward sensitivity reactions are likely, particularly in those who previously demonstrated penicillin hypersensitivity or with history of allergy, asthma, hay fever, or urticaria. Adverse reactions reported with cyclacillin: diarrhea (in approximately 1 out of 20 patients treated), nausea and vomiting (in approximately 1 in 50), and skin rash (in approximately 1 in 60). Isolated instances of headache, dizziness, abdominal pain, vaginitis, and urticaria have been reported. (See WARNINGS) Other less frequent adverse reactions which may occur and are reported with other penicillins are anemia, thrombocytopenia, thrombocytopenic purpura, leukopenia, neutropenia and eosinophilia. These reactions are usually reversible on discontinuation of therapy.

As with other semisynthetic penicillins, SGOT elevations have been reported.

As with antibiotic therapy generally, continue treatment at least 48 to 72 hours after patient becomes asymptomatic or until bacterial eradication is evidenced. In Group A beta-hemolytic streptococcal infections, at least 10 days' treatment is recommended to guard against risk of rheumatic fever or glomerulonephritis. In chronic urinary tract infection, frequent bacteriologic and clinical approisal is necessary during therapy and possibly for several months after. Persistent infection may require treatment for several weeks.

Cyclacillin is not indicated in children under 2 months of age.

Patients with Renal Failure Cyclacillin may be safely administered to patients with reduced renal function. Due to prolonged serum half-life, patients with various degrees of renal impairment may require change in dosage level (see DOSAGE AND ADMINISTRATION in package insert).

Dosage (Give in equally spaced doses)

INFECTION	ADULTS	CHILDREN*
Respiratory Tract		
Tonsillitis & Pharyngitis	250 mg q.i.d.	body weight < 20 kg (44 lbs) 125 mg q.i.d. body weight > 20 kg (44 lbs) 250 mg q.i.d.
Bronchitis and Pneumonia		
Mild or Moderate Infections	250 mg q.i.d.	50 mg/kg/day q.i.d.
Chronic Infections	500 mg q.i.d.	100 mg/kg/day q.i.d.
Otitis Media	250 mg to 500 mg q.i.d.†	50 to 100 mg/kg/day†
Skin & Skin Structures	250 mg to 500 mg q.i.d.†	50 to 100 mg/kg/day†
Urinary Tract	500 mg q.i.d.	100 mg/kg/day

*Dosage should not result in a dose higher than that for adults.
†depending on severity

How Supplied Tablets 250 mg and 500 mg in bottles of 100. Oral Suspension 125 mg and 250 mg per 5 ml in bottles to make 100 ml and 200 ml of Suspension.

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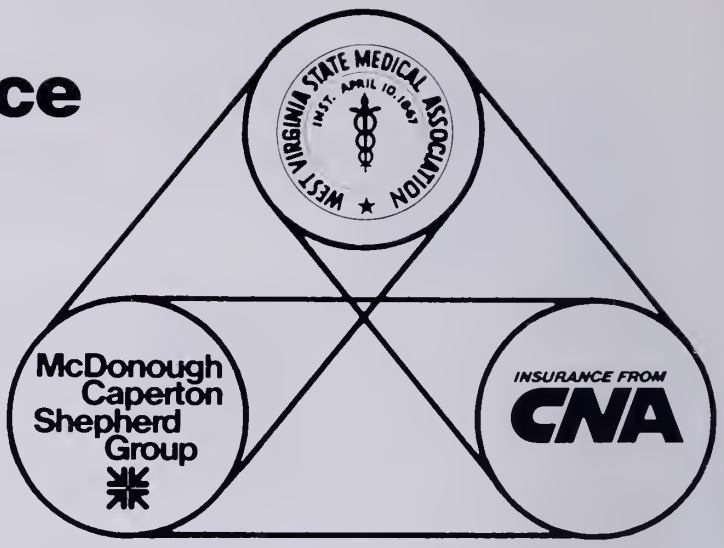

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10,000,000 alcoholics. Ethanol may produce many effects that together bring about nutritional deficiencies, so that alcoholism affects nutrition at many levels.[1]

25,500,000 geriatric patients. The older patient may have some disorder or socio-economic problem that can undermine good nutrition.[2]

23,500,000 surgical patients. Nutritional status can be compromised by the trauma of surgery; and some operations interfere with the ingestion, digestion and absorption of food.[3]

Before prescribing, please consult complete product information, a summary of which follows:
Each Berocca® Plus tablet contains 5000 IU vitamin A (as vitamin A acetate), 30 IU vitamin E (as *dl*-alpha tocopheryl acetate), 500 mg vitamin C (ascorbic acid), 20 mg vitamin B_1 (as thiamine mononitrate), 20 mg vitamin B_2 (riboflavin), 100 mg niacin (as niacinamide), 25 mg vitamin B_6 (as pyridoxine HCl), 0.15 mg biotin, 25 mg pantothenic acid (as calcium pantothenate), 0.8 mg folic acid, 50 mcg vitamin B_{12} (cyanocobalamin), 27 mg iron (as ferrous fumarate), 0.1 mg chromium (as chromium nitrate), 50 mg magnesium (as magnesium oxide), 5 mg manganese (as manganese dioxide), 3 mg copper (as cupric oxide), 22.5 mg zinc (as zinc oxide).

Indications: Prophylactic or therapeutic nutritional supplementation in physiologically stressful conditions, including conditions causing depletion, or reduced absorption or bioavailability of essential vitamins and minerals; certain conditions resulting from severe B-vitamin or ascorbic acid deficiency; or conditions resulting in increased needs for essential vitamins and minerals.
Contraindications: Hypersensitivity to any component.
Warnings: Not for pernicious anemia or other megaloblastic anemias where vitamin B_{12} is deficient. Neurologic involvement may develop or progress, despite temporary remission of anemia, in patients with vitamin B_{12} deficiency who receive supplemental folic acid and who are inadequately treated with B_{12}.
Precautions: *General:* Certain conditions may require additional nutritional supplementation. During pregnancy, supplementation with vitamin D and calcium may be required. Not intended for treatment of severe specific deficiencies. *Information for the Patient:* Toxic reactions have been reported with injudicious use of certain vitamins and minerals. Urge patients to follow specific dosage instructions. Keep out of reach of children. *Drug and Treatment Interactions:* As little as 5 mg pyridoxine daily can decrease the efficacy of levodopa in the treatment of parkinsonism. Not recommended for patients undergoing such therapy.
Adverse Reactions: Adverse reactions have been reported with specific vitamins and

5,000,000 hospital patients with infections.[4] Many are anorectic and may have a markedly reduced food intake. Supplements are often provided as a prudent measure because the vitamin status of critically ill patients cannot be readily determined.[3]

The incalculable millions on calorie-reduced diets. Patients ingesting 1000 or fewer calories per day could be at high risk because this intake may not supply most nutrients in adequate amounts without supplementation.[5]

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A balanced formula for prophylactic or therapeutic nutritional supplementation.
Berocca Plus Tablets provide: therapeutic levels of ascorbic acid and B-complex vitamins; supplemental levels of biotin, vitamins A and E, and five important minerals (iron, chromium, manganese, copper and zinc); plus magnesium. Berocca Plus is not intended for the treatment of specific vitamin and/or mineral deficiencies.

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References: 1. Shaw S, Lieber CS: Nutrition and alcoholism, chap. 40, in *Modern Nutrition in Health and Disease*, edited by Goodhart RS, Shils ME. Philadelphia, Lea & Febiger, 1980, pp. 1220, 1237. 2. Watkin DM: Nutrition for the aging and the aged, chap. 28, in *Modern Nutrition in Health and Disease, op. cit.*, p. 781. 3. Shils ME, Randall HT: Diet and nutrition in the care of the surgical patient, chap. 36, in *Modern Nutrition in Health and Disease, op. cit.*, pp. 1084, 1089, 1114. 4. Dixon RE: *Ann Intern Med 89* (Part 2): 749-753, Nov 1978. 5. Committee on Dietary Allowances, National Research Council: Recommended Dietary Allowances, ed 9. Washington, National Academy of Sciences, 1980, p. 13.

minerals, but generally at levels substantially higher than those in Berocca Plus. However, allergic and idiosyncratic reactions are possible at lower levels. Iron, even at the usual recommended levels, has been associated with gastrointestinal intolerance in some patients.
Dosage and Administration: Usual adult dosage: one tablet daily. Not recommended for children. Available on prescription only.
How Supplied: Golden yellow, capsule-shaped tablets—bottles of 100.

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In Vertigo

On Balance...

RU-VERT®

Each Tablet Contains:

Pentylenetetrazol	25.0 mg
Pheniramine maleate	12.5 mg
Nicotinic acid	50.0 mg

Clinically proven actions

- Antihistaminic
- Cerebral stimulant
- Vasodilator

Few side effects

- Vasodilation occasionally causes facial flushing which can be minimized by recommending that Ru-Vert® be taken following meals or with food.

Dosage

- One or two tablets three times a day

Please see next page for a summary of prescribing information

MANUFACTURED & DISTRIBUTED BY

BOOTS PHARMACEUTICALS, INC.
Shreveport, Louisiana 71106
Pioneers in medicine for the family

In Vertigo

On Balance...

RU-VERT®

See following prescribing information.

DESCRIPTION: Each tablet contains the following active ingredients:

Pentylenetetrazol	25.0 mg
Pheniramine maleate	12.5 mg
Nicotinic acid	50.0 mg

INDICATIONS: Ru-Vert is indicated as an adjunct therapy in the symptomatic treatment of acute or chronic vertigo.

CONTRAINDICATIONS: Convulsive disorders or known history of sensitivity to any of the listed active ingredients. Because of the vasodilating action of nicotinic acid, Ru-Vert should not be used in patients with hypotension.

WARNINGS: The safety of this preparation during pregnancy and lactation has not been established. Use of this drug requires that the physician evaluate the potential benefits of the drug against any possible hazard to the mother and child.

PRECAUTIONS: Although there are no absolute contraindications to pentylenetetrazol, it should be used with caution in epileptic patients or those known to have a low convulsive threshold or a focal brain lesion. Caution should be exercised when treating patients with high doses of Ru-Vert who have heart disease. While pentylenetetrazol does not act directly on the myocardium, the results from central vagal stimulation could cause bradycardia.

Pheniramine maleate, like other antihistamines, may produce sedative side effects in certain patients.

Transient vasodilatation due to rapid absorption of nicotinic acid may produce facial flushing and a sensation of warmth. These effects may be ameliorated by recommending that Ru-Vert be taken following meals or with food.

ADVERSE REACTIONS: Pentylenetetrazol in high doses may produce toxic symptoms typical of central nervous system stimulants, which act on the higher motor centers and the spinal cord. Convulsions resulting from this drug are spontaneous and are not induced by external stimuli. They usually last for several minutes and are followed by profound depression and respiratory paralysis. Death has been reported from the ingestion of 10 grams of pentylenetetrazol.

DRUG ABUSE: Drug dependence has not been reported with Ru-Vert.

OVERDOSAGE: Signs and symptoms of acute overdose may be due primarily from overstimulation of the central nervous system and from excessive vasodilatation with resulting autonomic nervous system imbalance. The symptoms may include the following: vomiting, agitation, tremors, hyperreflexia, sweating, confusion, hallucinations, headache, hyperpyrexia, tachycardia. Treatment consists of appropriate supportive measures. If signs and symptoms are not too severe and the patient is conscious, gastric evacuation may be accomplished by induction of emesis or gastric lavage.

Intensive care must be provided to maintain adequate circulation and respiratory exchange.

DOSAGE AND ADMINISTRATION: The recommended dosage of Ru-Vert for vertigo or motion sickness is 1 or 2 tablets three times a day with meals or light snacks.

This drug is not for use in children under 12 years of age.

HOW SUPPLIED:

Bottles of 100 tablets	**NDC** 0524-0060-01
Bottles of 300 tablets	**NDC** 0524-0060-03

Federal law prohibits dispensing without prescription.

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Strongyloidiasis In West Virginia

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Strongyloides stercoralis is an intestinal helminth seen occasionally in West Virginia. It is found most often in children, although it may cause life-threatening infection in the immunosuppressed adult. Autoinfection may allow the parasite to persist for many years. Symptoms include eosinophilia, diarrhea, abdominal pain and weight loss. Diagnosis is by identification of larval forms in the stool or duodenal aspirate. Treatment is oral thiabendazole.

Strongyloides stercoralis, the threadworm, is an intestinal parasite common in the rural southern United States. The infection is not unusual in West Virginia. The State Hygienic Laboratory reported nine cases in 1978-79 and three cases in 1979-80.[1] A screening study done in Eastern Kentucky in 1963 reported a four-per cent prevalence.[2]

This paper summarizes the courses of five patients with strongyloidiasis presenting to the Marshall University School of Medicine Pediatric and Medical Services during the past 24 months. Each case reflects important aspects of Strongyloides infection. The life cycle, clinical features, diagnosis and treatment of strongyloidiasis are described.

Case 1. This three-year-old female was hospitalized for evaluation of growth failure and eosinophilia. She was below the fifth percentile for height and weight. One week prior to admission, her mother noted the passage of a large pale worm, presumably *ascaris lumbricoides.* She had complained for months of vague, mid-abdominal pain. Her mother reported several loose, but not liquid, daily stools. The patient lived in an isolated rural area with four siblings, four cousins, and her mother and father in a three-room house without indoor plumbing. Water supply was by hand pump from a shallow well. The child never wore shoes and none were brought to the hospital.

Physical examination was within normal limits except for small stature (third percentile) and dental caries. Hemoglobin was 9.9 g/dl, hematocrit 29.9 per cent. The white blood count was 14,000/mm^3 with a differential of 32 segs, one stab, 45 lymphs and 22 eos. Bone age showed growth retardation, and stool was positive for occult blood. Urinalysis, electrolytes, sweat chloride, hemoglobin electrophoresis, cortisol level, and tuberculin test results were normal. T4 was 10 ug/dl. Stool culture showed no pathogens.

Three stools for ova and parasites were obtained without purgation. Ova of *Ascaris lumbricoides* and hookworm were identified. *Giardia lamblia* cysts and rhabditiform larvae of *Strongyloides stercoralis* were presente.

Instructions were given for hand washing, privy use and fingernail care. Shoes were obtained.

Treated with Thiabendazole

The patient was treated with thiabendazole (Mintezol) 25mg/kg twice daily for two days. One week later, mebendazole (Vermox) 100mg was administered twice daily for three consecutive days as an outpatient. A course of quinacrine (Atabrine) was given the following week. Follow-up CBC one month following admission showed hemoglobin 10.6 g/dl, hematocrit 33

per cent, WBC 9,000/mm^3 with a differential of 47 segs, 43 lymphs, seven eos and three basos. A weight gain of two pounds was recorded. Three stools were free of ova and parasites.

COMMENT: Strongyloides often occurs in the young, the barefooted and those in deprived socioeconomic settings. Multiple parasitic infections often co-exist with strongyloidiasis.

Case 2. This two and one-half-year-old female was seen as an outpatient for skin rash and intermittent fever. Hemoglobin was 12.1 g/dl. and WBC was 26,000/mm^3 with a differential of nine segs, 34 lymphs and 57 eos. Stool for ova and parasites showed *Ascaris lumbricoides* ova and rhabditiform larvae of *Strongyloides stercoralis.* Treatment with thiabendazole 25mg/kg BIDx2 and piperazine syrup (Antepar) 1.25 gm once daily for two days was administered. CBC two weeks later showed WBC 11,600/mm^3 with five per cent eosinophils. Repeat stool examination showed no ova or parasites. Eosinophilia of 18 per cent was noted on her two-month follow-up visit, and retreatment with thiabendazole was given despite negative stool examination.

COMMENT: Marked eosinophilia may suggest the diagnosis of intestinal parasites including strongyloidiasis. Eosinophilia sometimes does not occur, however, even with severe infection. A highly elevated white count may be present. The differential diagnosis includes toxocariasis (visceral larval migrans), trichinosis and nonparasitic processes. Readministration of thiabendazole after relapse of eosinophilia is often advisable, even with several negative stool examinations, because of a 10- to 20-per cent failure rate with initial treatment.[3]

Case 3. A nine-year-old female was seen as an outpatient for investigation of a single seizure. Past history included upper abdominal pain of several months' duration.

Present with Toxocara

Physical examination revealed a small and thin, but healthy appearing, girl. CBC showed WBC 9,600/mm^3 with a differential of 31 segs, 61 lymphs, one monos and 17 eos. Stools showed rhabditiform larvae of Strongyloides. ELISA test for Toxocara was positive at a titer of 1:128. Thiabendazole 500mg BID for two days was given.

COMMENT. Strongyloides was present here with Toxocara. Both are treated with environmental control and thiabendazole therapy. The effectiveness of thiabendazole for treatment of Toxocara infection has not been fully demonstrated.

Case 4. A 75-year-old female was referred to the Marshall Internal Medical Service for severe, widespread arthralgias, elevated sedimentation rate and severe anemia. The patient was receiving oral corticosteroids for a previous diagnosis of polymyalgia rheumatica. CBC showed hemoglobin 8.2 g/dl, hematocrit 24 per cent and WBC 7,000 mm^3. Differential count showed an eosinophilia of six per cent which on repeat was 19 per cent. Stool was positive for occult blood, and stool examination showed rhabditiform larvae of Strongyloides.

Contrast studies of the upper and lower gastrointestinal tract were normal. Serum iron was

Figure 1. Rhabditiform Larvae, 225 microns in length. This is the usual diagnostic stage of Strongyloides. There is a bulbed esophagus at the first curve and a prominent genital premordium, midway, at the second curve. (Photograph courtesy of the West Virginia State Hygienic Laboratory.)

normal. A bone marrow examination showed clusters of atypical plasma cells. Serum immunoelectrophoresis showed an abnormal peak in the IgC region, and urine immunoelectrophoresis showed the presence of abnormal kappa light chains.

On questioning, the patient stated she had been working daily in her garden without shoes. Thiabendazole 25mg/kg twice daily for two days was given. Follow-up stool examination was normal. A diagnosis of multiple myeloma was made.

COMMENT. Strongyloides occurs in adults, especially in the immune compromised host. The infection may be life threatening in this setting, and prolonged treatment is sometimes necessary.[4]

Seen for Cervical Adenopathy

Case 5. This six-year-old male was seen in an outlying clinic for cervical adenopathy. Physical examination was within normal limits except for moderately enlarged cervical nodes. Height and weight were in the 90th percentile. There were no respiratory or gastrointestinal complaints. Past history was negative for parasites in the patient and two siblings. Indoor plumbing was available. The mother stated her son wore shoes "most of the time" while outdoors.

Hemoglobin was 12.5 g/dl. WBC was 8,600/mm^3 with a differential of 39 segs, 36 lymphs, one monocyte, 22 eos and two baso. Toxocara and trichinella titres were non-diagnostic. Stools for ova and parasites showed rhabditiform larvae of Strongyloides.

Thiabendazole was administered twice daily for two days. Follow-up differential was 41 segs, 50 lymphs, two monos and seven eos. Two stools for ova and parasites were negative one month later. Family members, including two siblings, had negative stool examinations for parasites.

COMMENT: Strongyloides may be found in the apparently asymptomatic, well-nourished child. Treatment of this child and investigation in siblings is important because of the potential for autoinfection.

Description and Life Cycle

Strongyloides is "that worm with the complicated life cycle." It combines cycles resembling those of both Ascaris and hookworm. The adult female, 2.2 x .04mm, inhabits the upper intestinal tract. Reproduction may be parthenogenic, since the male has been found only in a free-living form in the soil. Several dozen eggs are produced daily, but are seldom seen in feces. Eggs release rhabditiform larvae (Figure 1) before elimination. The larvae are deposited in the soil where they may live and reproduce for several generations.

The infectious form of Strongyloides, the filariform larvae (Figure 2), develops from the rhabditiform larvae. Filariform larvae can penetrate mucous membranes or skin, usually of the feet, and enter the venous circulation. Filari-

Figure 2. Filariform Larvae, 500 microns in length. The esophagus extends approximately one-half the length of the body. The characteristic notched tip of the tail is not visible at this magnification. (Photograph courtesy of the West Virginia State Hygienic Laboratory.)

form transformation may occur while still in the intestinal tract. Penetration of the bowel or perianal skin can result in autoinfection, a feature unique among parasites endemic to North America. The larvae are carried to the pulmonary circulation where they enter alveoli. Verminous pneumonia is not uncommon in heavy Strongyloides infection. Organisms are delivered to the hypopharnyx, swallowed, and complete maturation in the small bowel. The cycle is completed in about three weeks.

EPIDEMIOLOGY. *Strongyloides stercoralis* infection is found worldwide. In the United States it is found commonly only in the rural South. Barefoot individuals, particularly children, who walk in areas contaminated by human feces, are frequently infected. Lack of indoor plumbing and the use of human night soil for agriculture are the major contributing factors. Reports of Strongyloides infestation in the immune comprised host are becoming more common. Autoinfection may be more common in these circumstances.[5]

Clinical Features

CLINICAL FEATURES. In keeping with the versatility of the organism, strongyloidiasis may present with a great variety of symptoms. Vague abdominal pain is common. A malabsorption picture with abdominal distension and diarrhea with malodorous stools may occur. Weight loss is especially common in children. Heavy infestations commonly cause symptomatic anemia.

The site of skin penetration may develop a non-specific, pruritic rash, especially after repeated exposure. The rare form of cutaneous larva migrans associated with Strongyloides, larva currens, is distinctive because of its rapid spread.[6]

Laboratory findings, other than identification of rhabditiform larvae in the stool, also are variable. Marked eosinophilia may occur. Rarely, either ova or filariform larvae may be identified in feces. Stools often are positive for occult blood. In West Virginia, Strongyloides often coexists with other intestinal parasites.

Radiologic findings may be present during pulmonary migration. Patchy, fleeting infiltrates may occur. Studies of the gastrointestinal tract may be normal or show non-specific inflammatory changes with shortened transit time, mucosal nodularity or ulceration.

In the immune comprised patient, infection may be overwhelming with severe diarrhea, secondary gram negative septicemia or life-threatening pneumonia.[7]

Diagnosis

DIAGNOSIS. The diagnosis is based on finding the rhabditiform larvae in the stool. There is a resemblance between rhabditiform larva of hookworm and that of Strongyloides. This can be confusing to the inexperienced, or when both are present in a specimen. Strongyloides rhabditiform larvae have a shorter buccal chamber and a large genital premordium between esophagus and anus. Since a relatively small number of larvae are produced daily by each adult female, multiple, fresh examinations may be required. Occasionally, duodenal aspirate will reveal organisms despite several negative stool exams.[8]

TREATMENT. The treatment of choice for strongyloidiasis is oral thiabendazole, a larvicidal drug, 25mg/kg given twice daily for two days. Thiabendazole has many mild, self-limited side effects: gastrointestinal upset with anorexia, nausea and vomiting is not uncommon, and a syndrome of headache, weakness and dizziness can occur. Since there is a treatment failure rate of up to 20 per cent, subsequent, repeat stool examinations and retreatment are advisable. Pyrvinium pamoate (Povan), a drug usually used for pinworm infection, is an alternate therapeutic agent when given five mg/kg in three divided doses for seven days (maximum 250mg/day). The drug has been reasonably effective.

Editor's Note: Here are generic drugs and trade names (in parentheses) to which reference is made in this manuscript: thiabendazole (Mintezol), piperazine (Antepar), pyrvinium pamoate (Povan), mebendazole (Vermox), and quinacrine (Atabrine).

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Colo-Rectal Carcinoma: A Decade Of Experience At Ohio Valley Medical Center

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This is a retrospective analysis of 298 patients admitted to the Ohio Valley Medical Center, Inc., Wheeling, West Virginia, during a 10-year period and followed for at least five years or until death. The females predominated 55 per cent to 45 per cent. Of the patients, 75 per cent were in the seventh decade or beyond. The average hospital stay was 22.5 days. The crude five-year survival was 48 per cent. The total postop mortality was 5.1 per cent, but only 3.8 per cent in curative resection.

There was a high incidence of associated disease, alcoholism, multiple-organ involvement and family history of colon cancer. The distribution of lesions in the large bowel documented the recent shift towards the right colon at the expense of the rectosigmoid area.

Only 28 per cent with positive lymph nodes survived five years. One in five of the total group developed distant metastases; one in 10 had both distant and regional metastases; and six per cent developed local recurrence. All patients who refused treatment or had a combination treatment died within one year.

MUCH has been written on the subject of carcinoma of the colon and rectum during the past 30 years. Since this form of cancer ranks second in incidence to that of the lung and breast and is surpassed only by carcinoma of the lung as a cause of death from cancer in the United States, this somewhat voluminous paper seems justified. Public health data, moreover, indicate that the percentage of colo-rectal cases probably is increasing at a faster rate than is the population of this country. On the basis of rates of incidence of cancer recorded and total death rates per year, approximately one in 30 newborn males and one in 25 newborn females may be expected to have cancer of the colon or rectum at some time during their lives.

Statistics prepared by the American Cancer Society (ACS) indicate that in 1981 in the United States there were 120,000 new cases of cancer of the colon and 54,900 deaths from this disease.

The fact that the cure rates for such a common disease have remained on a plateau for the past three decades is discouraging. Many facts are known about the disease. Methods of diagnosis and treatment are well established. Nevertheless, survivals five years after operation are about the same now as they were a decade ago. Adjusted for a normal life expectancy, the ACS estimates that 44 per cent of all patients with the disease survive five years.[1,6,12,13,15,16,20,24]

It is the purpose of this article to give a review of the management of colo-rectal cancer at Ohio Valley Medical Center, Inc., Wheeling, West Virginia. Selections of treatment and the rationale behind them are protean. It is impossible to give rigid guidelines and criteria for the choice of treatment. Age, sex and build of the patient; his attitude toward the prospect of a colostomy; site, size and histology of the tumor, and personal experience and endeavor of the surgeon are factors that influence the choice of treatment.

When dealing with cancers of the colon, surgeons resect a considerable length of bowel on either side of the tumor in order to remove widely the mesentery with its potentially invaded lymph nodes. For cancers of the upper rectum and sigmoid colon above the peritoneal reflection, cure can be obtained by using the lymphatic "watershed" as the distal margin of the lymph node dissection. The crucial point with rectal cancers in the vicinity of the peritoneal reflection is to know how much bowel distal to the tumor should be resected. The extent of the distal intramural spread of the tumor will determine this margin.[1,6,9,10,11,12,13,14,15,16,24]

Three Equal Parts

To simplify, we divide the rectum into three equal parts. For tumors of the upper third, anterior proctosigmoidectomy and colo-rectal anastomosis are the treatments of choice. When resectional surgery is required for tumors of the lower third of the rectum, abdomino-perineal resection is almost mandatory. The middle third of the rectum is the "grey zone," where factors

such as histology, size of tumor, and build of the patient will be taken into consideration to decide between an abdomino-perineal resection or a sphincter-saving procedure.

The stage of disease determines the chance of survival. The modified Duke's classification we follow reflects the duration and biologic behavior of the growth.

During a 10-year period, 370 patients with carcinoma of the colon and rectum were admitted to the surgical department of this hospital. Twenty-two patients (5.9 per cent) were repeat admissions, and 50 patients (13.5 per cent) were lost to follow-up. The charts of the remaining 298 patients serve as the basis for review. All have been followed for at least a five-year period or until death. During this 10-year period, operative procedures were carried out by 14 surgeons (Tables 1, 3, 4).

These 298 patients included 65 with carcinoma of the rectum and 233 with carcinoma of the colon. More than one half were 60 years of age or older, with an average of 62. Fifty-five per cent of the group was female. The average hospital stay was 22.5 days (Table 1). As noted by many others, these patients tend to have other non-related diseases, either concomitant or noted in the past medical history (Table 9). The patients in this series had a high incidence of alcoholism (14.3 per cent), smoking for more than one year (46.3 per cent), diabetes mellitus (12.4 per cent), and a previous history of colon cancer (12.4 per cent).

Complete records of gross pathologic findings, histopathology and classification were available for only 141 pathologic specimens. Seventy-seven patients (31.8 per cent) had a synchronous polyp (Table 7), 23 (9.5 per cent) had multiple primaries as well, while 18 patients (7.4 per cent) had second primaries. In our series there also is a high percentage (26.5 per cent) of patients with multiple-organ involvement with cancer during their life span (Table 9). Spatial distribution of lesions shows a shift to right, though 33.9 per cent of the lesions still are in the distal part of the large bowel (Figures 1, 2).

Two Groups Defined

In reviewing the features of their initial management, two groups are defined. One group of 242 patients (81.2 per cent) was treated surgically while the remaining 56 (18.7 per cent) were treated non-surgically for one reason or another (Table 12). Our survey is concerned with the surgically-treated group. The records show that 84.4 per cent of these patients had a primary resection while 15.2 per cent underwent a less extensive procedure. The majority (66.9 per cent) had a curative resection using both conventional and no-touch isolation techniques.

TABLE 1

Incidence Related to Age and Sex in Colo-Rectal Cancer in 298 Patients

Age/Year	*No. Pts.*	*Male*	*Female*	*Immediate Mortality* *Total*	*Male*	*Female*	*5-Year Survival*
39	2	–	2	–	–	–	100%
40-49	13	4	9	1	1	–	53.8%
50-59	46	20	26	2 (4.3)	1	1	58.6%
60-69	93	38	55	4 (4.3)	2	2	32.2%
70-79	88	41	47	9 (10.2)	3	6	29.7%
80	56	31	25	5 (8.9)	3	2	12.5%
Total	298	134 44.9%	164 55%	21 (7%)	10 3.3%	11 3.6%	47.8%

*Average Hospital Stay: 22.47 days

TABLE 2

Preoperative Investigations

Exam. or Test	*(–) Done*	*(+) Done*	*Not Done (%)*
Rectal	172	66	60 (20.1%)
Proctosigmoidoscopy	100	109	89 (29.8%)
Barium Enema	14 missed 4.6%	240	44 (14.7%)
Air Contrast Enema	–	8 (2.6%)	–
CEA	–	37 (12.4%)	–

Eighty-five per cent of the procedures were elective. Multiple modes of drainage, wound closure and incisions were used (Tables 12, 13, 14).

Local, regional, and distant recurrences occurred in 20 per cent. An anastomotic line recurrence in this series is a recurrence within two cms. of the suture line. All non-treatment or combination-treatment patients were dead in less than one year. The current status of these 298 patients shows that 99 are living and, of these, 83 are free of disease.

The data obtained from this study were analyzed in several ways. The most significant findings appear to be those pertaining to operative morbidity and mortality, five-year survival and long-term results, and factors associated with recurrences and other treatment failures.

Age (Table 1): Of all the patients, only two were under 39 years of age, and 56 patients were over 80. One third were in the seventh and eighth decades of life. Patients with the highest five-year survival were two decades younger, that is, in the fifth and sixth decades.

Sex (Table 1, 3, 4): In this series, there were more females (55 per cent) than males (45 per cent). Females accounted for 60 per cent of rectal carcinomas and 53.6 per cent of colon carcinomas. The mortality rate among the female group essentially was the same as the male, but doubled the rate of the male group in colon cancers.

TABLE 3

Incidence Related to Age and Sex In Rectal Cancer in 65 Patients

				Immediate Mortality		
Age/Year	*No. Pts.*	*Male*	*Female*	*Total*	*Male*	*Female*
<39	2	–	2	–	–	–
40-49	5	2	3	1	1	–
50-59	8	4	4	1	–	1
60-69	20	9	11	1	1	–
70-79	16	4	12	2	1	1
>80	14	7	7	2	1	1
Total	65/298	26	39	7	4	3
	(21.8%)	40%	60%	10.7%	6.1%	4.6%

TABLE 4

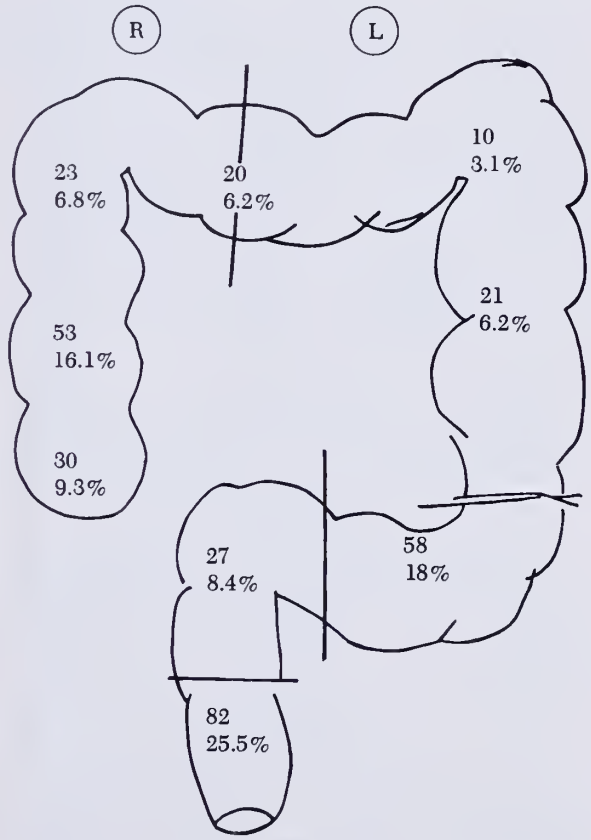
Incidence Related to Age and Sex in Colon Cancer in 233 Patients

				Immediate Mortality		
Age/Year	*No. Pts.*	*Male*	*Female*	*Total*	*Male*	*Female*
<39	–	–	–	–	–	–
40-49	8	2	6	–	–	–
50-59	38	16	22	1	–	1
60-69	73	29	44	2	1	1
70-79	72	37	35	8	3	5
>80	42	24	18	3	1	2
Total	233/298	108	125	14	5	9
	(78.1%)	46.3%	53.6%	6.0%	2.1%	3.8%

Diagnosis (Table 2): All the tumors were diagnosed by barium enema or proctosigmoidoscopy. Digital rectal examination was done in 80 per cent of cases, proctosigmoidoscopy in 71 per cent, and barium enema in 86 per cent. Air contrast enema was done in only 2.6 per cent of cases, and CEA levels were obtained in 12.4 per cent of patients. False negatives in the whole series of barium enema studies were 4.6 per cent. Most lesions that were eight cms. or less from the dentate line were palpated by digital examination of the rectum.

Locations

Locations (Figures 1, 2): The literature is replete with statistics reporting the incidence of cancer of the bowel in various segments of the colon and rectum. Our series showed that 35.5 per cent of the lesions were located in the right



Total: 324 Lesions
(R) Colon: 116 (35.5%)
(L) Colon: 99 (30.5%)
Rectosigmoid: 27 (8.4%)
Rectum: 82 (25.5%)

Figure 1. Pathology. Site and distribution: (A) Colorectal.

colon, 30.5 per cent in the left colon, and the remaining 33.9 per cent in the rectosigmoid and rectal area. If one combines the sigmoid with rectosigmoid and rectal lesions, 51.9 per cent of all the lesions were located in the distal part of the large bowel (range of flexible sigmoidoscope). Further subdividing the colon, we find that splenic flexure lesions had the lowest incidence with 3.1 per cent. The descending colon, transverse colon and hepatic flexure had

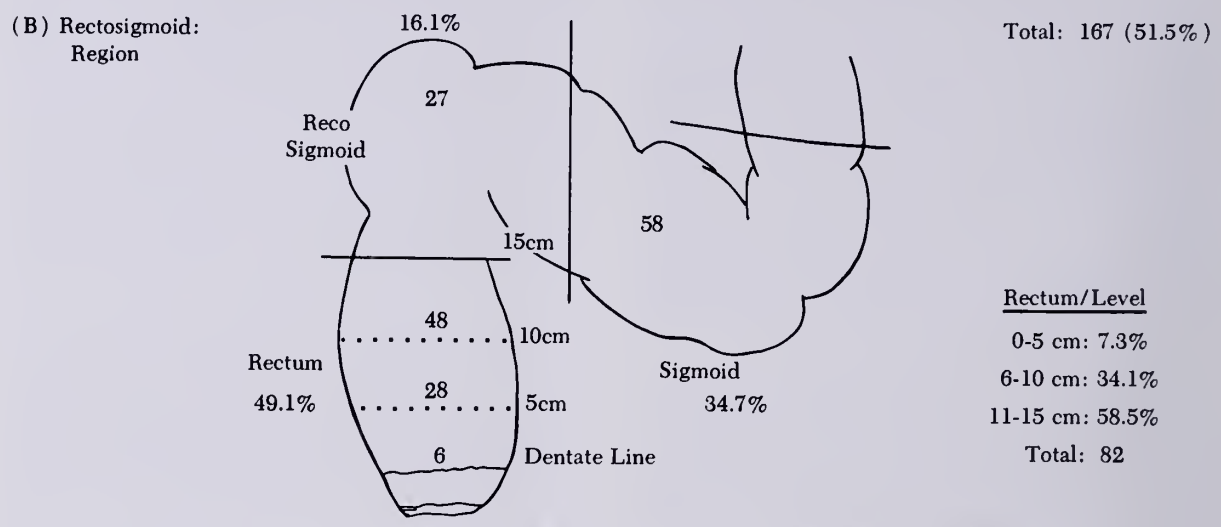


Figure 2. Pathology. Site and distribution: (B) Rectosigmoid Region.

TABLE 5

Duke's Staging* **Pathology**

Duke's Staging	*No. Pts.*	*Immediate Mortality*	*5-Year Survival No. Pts.*	*%*
A	14 (9.3%)	– (0%)	12	85.7
B	63 (44.6%)	2 (3.17%)	47	74.6
C	51 (36.1%)	4 (7.8%)	23	45
D	13 (9.2%)	1 (7.6%)	–	–
Total*	141	7 (4.9%)		51.25

*Average No. of L.N. found per specimen was 20 L.N. Average positive L.N. per specimen was 7+L.N.

TABLE 6

5-Year Survival Vs. L.N. Involvement

L.N.	*Pts. %*	*5-Year Survival %*
Positive	57.2	27.9
Negative	42.7	80.15

TABLE 7

Synchronous Polyps*

Number of Polyps		*Size of Polyps*	
No. of Polyps	*No. Pts.*	*Size/cms*	*No. Pts.*
1	43 (55.8%)	0.3-1	45 (58.4%)
2	19 (24.6%)	1-2	25 (32.4%)
3	15 (19.4%)	2-3	7 (9%)
Total	77	Total	77

*Histology: 64 were adenomatous polyps (83.1%) 13 were villous type (16.8%)

TABLE 8

Wound Infection Related to One Surgeon/Over a Decade

Year	*Wound Total*	*Wound Non-infected*	*Wound Infected*	*Wound Closure/Type*
70-74	27	23	3 (11.1%)	Delayed Primary
75-79	38	35	2 (5.2%)	"Wicking"
Total	65	58	5 (7.6%)	

TABLE 9

Pathology

Multiple Organ Involvement With Cancer*

Organ	*No. Pts.*
Uterine	13
Breast	11
Lung	10
Prostate	8
Ovaries	6
Pancreas	5
Gastric	5
Neck Mass	4
Oropharynx	4
Renal	4
Thyroid	3
Mediastinal Mass	2
Miscellaneous	4
Total	79/298 (26.5%)

*During patient life span

TABLE 10

Pre-Op Evaluation

Patients pre-operative status and its effect on hospital stay, complications and immediate mortality

Symptoms	*No. Pts.*	*Discharged < 21 days*	*Discharged > 21 days*	*No. of Complications*	*Immediate Mortality*	*Group*
Anemia <35 Ht.	139	60 (43.1%)	79 (56.8%)	39 (28%)	3 (2.15%)	1
Albumine <3.5	114	54 (47.3%)	60 (52.6%)	36 (31.5%)	3 (2.63%)	2
Wt. Loss >20 lb.	172	72 (41.8%)	100 (58.1%)	34 (19.7%)	8 (4.65%)	3
All Above	94	36 (38.2%)	58 (61.7%)	52 (55.3%)	7 (7.44%)	4

TABLE 11

Operation

Abdominal incisions and complications

Type	*No. Pts. %*	*Wound Infection %*	*Wound Dehiscence %*
Transverse °	175 (72.3)	8 (4.5)	3 (1.7)
Longitudinal !	67 (27.6)	5 (7.4)	2 (2.9)
Total	242	13 (5.3)	5 (2)

° Either Supra or Infra Umbilical
! Either Rt. or Lt. Paramedian or Median

6.2 per cent each. The ascending colon and cecal lesions constituted 16.1 per cent and 9.3 per cent, respectively.

Pathologic Data (Tables 5, 6, 7): All lesions were adenocarcinoma. Two thirds were well-differentiated cell types with a mortality rate of only 3.22 per cent; 9.2 per cent were poorly differentiated with a mortality rate of 15.3 per cent. Of the entire series, 93.6 per cent had a single lesion, while 6.9 per cent had more than two lesions as primaries. Almost half of the lesions were cauliflower in shape; a quarter, ulcerative, and another quarter, constrictive-annular in configuration.

Complete surgical-pathological studies were done on 141 specimens (58 per cent). In the operative group, the lesions were classified according to a modified Duke's classification: 9.3 per cent were Duke's A; 44.6 per cent, Duke's B; 36.1 per cent, Duke's C, and 9.2 per cent, Duke's D. Over half the total group had positive lymph nodes, with a consequential five-year survival rate of 27.9 per cent. Those with negative nodes had a five-year survival rate of 80.5 per cent.

One third had an associated polyp: 55.8 per cent of this group had a solitary polyp; 24.6 per cent had two polyps, and 19.4 per cent had more than three polyps. One half of the polyps were less than one cm. in diameter; however, all were smaller than three cms. Over 80 per cent were of the adenomatous type, the remainder, villous. Half were in the rectosigmoid area. The other half were scattered throughout the colon.

Of the entire series, 9.5 per cent had multiple primary malignant lesions, and 7.4 per cent developed a second primary lesion. The distribution of these second primaries was almost equal between the ascending and descending colon with a higher incidence in the younger age group. Of the entire 298 patients, 26.5 per cent had simultaneous or sequential involvement with cancer in other organs (Table 9).

Forty-eight patients had only liver metastases, and 43 patients had only positive lymph nodes. Twenty-six patients had both liver and lymph node involvement. None with liver metastasis survived five years. Fifty-six per cent had right lobe involvement; 29 per cent, left lobe metastases, and 14 per cent, metastases to both lobes.

The most common site for late metastasis was the liver with 16.5 per cent, followed by bone, 5.7 per cent; lung, 6.6 per cent, and brain, 4.1 per cent.

Surgical Data

Of the patients, 81.2 per cent had surgery, and 18.8 per cent had non-surgical management for various reasons (Table 12). A transverse incision was more commonly used (>70 per cent). Wound infections (4.5 per cent vs. 7.4 per cent) and dehiscence (1.7 per cent vs. 2.9 per cent) were less frequent complications with transverse, rather than vertical, incisions (Table 11).

In this group of patients, 67 per cent underwent resection for cure; 33 per cent, for palliation only. Eighty-five per cent of the operations were elective (Table 13). Over a quarter had been asymptomatic with tumors having been found on routine workup or as an incidental finding (Table 18). Forty-five per cent of the resections used a no-touch technique, while 55 per cent involved conventional resection with wide excision and removal of the lympatic drainage en bloc (Table 17).

In the resected group 33.6 per cent had a right hemicolectomy; 13.6 per cent, sigmoid

TABLE 12
Operation
Common Operative Procedures*
Mortality, Morbidity & 5-Year Survival

Procedure	*No. Pts.* %	*Mortality* %	*Complications* %	*5-Yr. Survival* No. Pts.	%
Primary Resection:					
Rt. Hemicolectomy	69 (33.6)	4.3	19	35	51
Lt. Hemicolectomy	34 (16.5)	5.8	25	15	44.1
Sigmoid Resection	28 (13.6)	3.5	21	15	53.5
Anterior Resection	41 (20)	2.4	22	21	51.2
Low Anterior Resection	12 (5.8)	8	33.3	5	41.6
Abd.-Perineal Resection	14 (6.8)	7.1	28.5	5	35.7
Transverse Colon Resection	5 (2.4)	—	—	3	60
Subtotal Colectomy	2 (0.9)	—	—	0	0
Total	205 (84.4)	3.8%	18.5%		48.1%
No. Resection of Primary:					
Exploratory Laparotomy	15 (40.5)	—	13.3	0	0
Colostomy	15 (40.5)	6.1	33.3	0	0
By-Pass Procedure	7 (18.9)	14.2	41.1	0	0
Total	37 (15.2)	6.6%	29.2%		
Grand Total	242	5.1%	21.3%	99	40.9%

* Surgery 242 (81.2%)
Non-Surgical 56 (18.8%)

TABLE 13
Operation

Operative Procedures	
Type	%
Elective	208/242 (85.9)
Non-elective (Perforation-Obstruction)	34/242 (14.0)
Technique	
No-touch Technique	111/242 (45.8)
Conventional	131/242 (54.1)
Resection	
Curative	162/242 (66.9)
Palliative	80/242 (33.0)

TABLE 14
Drainage in Extra-Peritoneal Anastomosis

Type	*No. Pts. %*	*Complications %*
Penrose drain	47 (69.1)	5 (10.6)
Sump suction*	21 (30.8)	1 (4.7)
Total	68	6 (8.82)

*Continuous irrigation with antibiotics & normal saline.

resection; 5.8 per cent, a low anterior resection, and 6.8 per cent, an abdominoperineal resection (Table 12).

Sixty-nine and one-tenth per cent had a Penrose drain with 10.6-per cent complications, while 30.8 per cent had sump suction with continuous irrigation with antibiotics and normal saline and a complication rate of 4.7 per cent (Table 14).

Complications were recorded in 24 of the 242 patients (9.91 per cent). The most frequent complication was sepsis (5.3 per cent): either wound infection (5.3 per cent), or intra-abdominal sepsis (two per cent). A clinically-suspected anastomotic leak occurred in five patients. The suspected leaks all involved left-sided colon anastomosis. Nine patients (3.7 per cent) had respiratory complications; six (2.4 per cent), urological complications, and four (1.6 per cent), cardiovascular problems (Table 15).

The wound infection rate for one surgeon during this 10-year period also was studied. In the first five years, there was an infection rate of 11.1 per cent using delayed primary closure, while there was a 5.2 per cent incidence in the second five years using "Wicks" in the wound closure, thus reducing wound infection incidence by 50 per cent (Table 8).

The highest incidence of complications was in the lower anterior resections. This incidence also correllated with high mortality (Table 14).

Recurrence, particularly local, after the treatment of colo-rectal cancer is a major concern as this represents a true surgical failure. Anastomotic recurrence was considered to be present whenever a lesion was detected within two cms. of the anastomosis. Intra-abdominal recurrence was evidenced by presence of a mass, ascites or obstruction. Pelvic recurrences were considered

to be present when demonstrated on physical examination. Of 162 patients who underwent curative resections, 12 (6.1 per cent) were found to have anastomotic recurrence: three had undergone anterior resection; four, a low anterior resection. Two patients with A.P. resections had developed local recurrences at the perineal wound. Another 17 patients with non-resectable masses were found to have a regional metastasis either in the pelvis or the abdomen.

Mortality

In the group of patients undergoing resection for cure, 3.8 per cent died postoperatively. This mortality rate was doubled in the non-resected group (Table 12).

There were 12 postoperative deaths. The cause of death in order of frequency were sepsis (4.5 per cent), pulmonary (two per cent), with carido-vascular, renal and hepatic failure accounting for one per cent each.

The five-year survival rate was highest in patients under 40 years of age, and lowest in patients aged 80 and above (Table 1).

Patients who underwent elective operations had a higher five-year survival rate than patients who had non-elective procedures (Tables 12, 18). There was no statistical difference in five-year survival between patients who had a no-touch isolation technique and patients who had conventional procedures (Table 17). Patients who underwent a curative resection had a better five-year survival than patients with palliative resections (Table 12).

TABLE 15
Operation
Postoperative Complications: (24 patients)*

Complication		*No. Pts.*	*%*
Sepsis		13	5.3
Wound Infection	13		
Wound Dehiscence	5		
Anastomotic leak	5		
Ileus	4		
Respiratory		9	3.7
Pneumonia, Atelectasis	9		
Pulmonary Insuff.	5		
Pulmonary Embolism	5		
Urological		6	2.4
U. T. I.	3		
Renal Failure	3		
Urinary Retention	4		
C.V.S. M.I., C.H.F., etc.		4	1.6
* 24/242			9.91%

Two thirds of asymptomatic patients and only one third of the symptomatic patients survived five years (Table 18).

Discussion

The formation of national and worldwide cancer registeries and the increased collection of mortality statistics have allowed estimations of the incidence and mortality rates for colorectal cancer. Certain patterns emerge from these figures. Our study shows that the community our hospital serves is at low risk.[24]

Patient ages (being older) in this series were a major factor in keeping the five-year survival rate at 48 per cent across the board. Only two patients were below 40 years of age, while the majority were of the seventh decade and beyond. The high percentage of associated diseases in these patients also played a role in keeping the overall survival rate low. As Calabrese and associates point out, it is not chronologic age per se that increases the risks, but the physiologic age of the patient.[18,24,27,30]

Evaluation of preoperative symptoms in these patients indicates that a weight loss of greater than 20 pounds correlates not only with a prolonged hospital stay, but with a high mortality rate. In patients who were asymptomatic, the five-year survival was double that of patients with symptoms.

TABLE 16
Operation
Mortality Vs. Operative Technique

Technique	*No. Pts. %*	*Mortality Rate %*	*5-Yr. Survival %*
No touch Isolation	111/242 (45.8)	5.43	48.9
Conventional	131/242 (54.1)	2.6	47.7

TABLE 17
Effect of Surgical Technique on Duke's C Pt. vs. Mortality

Technique	*No. Pts. %*	*Mortality Rate %*	*5-Yr. Survival %*
No-touch Isolation	18	11.11	44.4
Conventional	33	6.06	45.4

TABLE 18
Mortality Vs. Symptoms

Symptoms	*No. Pts. %*	*Mortality Rate %*	*5-Yr. Survival %*
Asymptomatic	65 (26.8%)	3%	61.52
Symptomatic	177 (73.1%)	5.6%	31.07

Evaluation of pre-treatment work-up revealed frequent omissions: 20 per cent had had no rectal examination, 30 per cent had had no proctosigmoidoscopy, and 14 per cent had no barium enema. Only 2.6 per cent of the entire group had air contrast enemas, and 12.4 per cent had CEA levels done. The false-negative result in the barium enemas was 4.6 per cent.

According to recent surgical literature, a changing pattern of distribution of primary cancers of the large bowel has occurred.[14,22] Our series showed a similar trend. Also, lesions in the rectum, rectosigmoid and sigmoid account for one half of the series. The diagnostic yield of rectal examinations has lessened to 25 per cent; proctosigmoidoscopy, to 33 per cent, and fibro-optic-sigmoidoscope, to 51 per cent.

High Incidence of Multiple Primaries

This report illustates the high incidence of multiple primaries and of benign polyps in association with colon carcinoma (31.8 per cent). Of this group of patients, five per cent had a polypectomy prior to surgery, and 12.4 per cent of them had a family history of colon cancer.

Seventy-five per cent of patients with a second primary had associated polyps at the first operation. As suggested by Morson, this is strong circumstantial evidence linking colo-rectal cancer with benign tumors of the large bowel. Such evidence made Cecilia Funoglio discard the concept of denovo carcinoma in the large bowel. With these grim pathologic statistics, Ripstein has advocated total colectomy as the proper treatment for carcinoma of the colon.[2,3,8,19,24,27]

The high incidence of involvement of other organs in our series is double that reported in the literature and helps to explain the higher mortality rate. Either before or simultaneously with primary colo-rectal cancer, one fourth of our entire series developed cancerous lesions of other ograns. This finding has not been reported before.

The results of operative procedures in our series are comparable to those in the literature, with several exceptions:

(1.) Though most of our patients had a primary resection with a high resectability rate, the low five-year survival rate is related to age, associated disease, a high incidence of multiple-organ involvement, and preoperative symptoms.

(2.) The five-year survival in conventionally-treated patients for cure was comparable to those who underwent no-touch isolation technique, indicating that the most important single technical consideration in the treatment of cancer of the colon is complete removal of the lymphatic drainage by as complete a resection of the mesentery of the cancer-bearing bowel segment as is feasible.

(3.) The practice of sump drainage with irrigation reduced by one half the complication rate experienced with the Penrose drainage.

(4.) In a small pilot study over a 10-year period, the selective use of "Wick" for abdominal wound closure reduced the wound infection rate by half.

(5.) Our complication rate was comparable to the national average. The most common cause of death was sepsis in anastomotic patients and cardiopulmonary complications in A. P. resection group.

(6.) There was no delay time between diagnosis and institution of treatment (two weeks).

(7.) The data show a low recurrence rate of 10 per cent for regional and distant metastases. The commonest site of recurrence was the sigmoid and rectum, other recurrences being distributed equally throughout the colon.

Comments

The mainstay of treatment of cancer of colorectum remains surgical excision.

The attack on polyps must be broadened.

The role of radiation treatment and chemotherapeutic agents could not be analyzed. The treatment of metastatic cancer remains unsatisfactory.

The obvious course must be to increase the attack on polypoid lesions with wide screening programs for individuals at high risk, and a proper surgical procedure when indicated. Only controlled studies will tell what role chemotherapy or radiation therapy alone or in conjunction with surgery will play. What now still seems improbable, the discovery of the cause of the disease, might eventually become reality.

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The cynic puts all human actions into two classes—openly bad and secretly bad.

—Henry Ward Beecher

Special Article

Problems and Prospects In Hospital Rate Regulation*

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As Director of the Office of Health Planning and Evaluation in the West Virginia Department of Health, one of my jobs is the regulation of health care facilities; and one of the expected products of that regulation is cost containment. However, other expected products of my office, i.e., improved access and quality, often cause cost increases. Through health planning, control of health care capital expenditures and collection of financial information that I and my staff do, I have developed some perceptions and insights into what's happening that may be helpful. Much of what I have to say is really in the form of hypotheses that need to be further studied and verified. I may indeed be wrong on some points, and I will be glad to be challenged so that their validity can be tested.

I liken economic regulation to the wearing of girdles. Designed to compress one bulge, a gridle creates a new bulge elsewhere unless consumption is also contained. Girdles do not stop the basic growth if the body is not yet mature. They do make a contribution to the appearance of the body. In deciding whether to put another one on, let's be sure it can do what we want and that it does not become part of the problem by creating a new, unwanted bulge.

Let's try to put hospital rate regulation in perspective, and first consider its impact on total expenditures.

In a gross sense, the problem we are addressing is the rate at which health care expenditures are consuming an increasing share of available dollars. The measure of this growth is the increasing percentage of the Gross National Product devoted to health care expenditures—from 7.6 per cent in 1970 to nine per cent for the year ending March, 1980, and 9.4 per cent for the year ending March, 1981. This has its impact on all of us in what we pay directly, in insurance premiums and in taxes. I see three fundamental causes of this problem.

First, and I think foremost, is the growing number (in absolute and relative terms) of people ages 65 and older who use health care services much more intensely than the rest of the population. This force behind increasing expenditures will not go away and probably accounts for most of the relative increase that is occurring (Figures 1, 2).

The *second* force that I see is the public's rising expectation of better access to a full range of high-quality services, including the benefits of improving technology. The public response to certificate of need applications and nursing home regulations are evidence of this. The public's choice of using the most sophisticated and expensive hospitals when lower-cost institutions might suffice is another example. These expectations are supported by the next cause, which protects the public from having to think about the costs of what they demand.

Third-Party Reimbursement

The *third* force is the third-party reimbursement system that protects most people from the financial risks of ill health and hospitals from the risks of bad investments. The system supports operating inefficiencies, cost-inducing competition, and excessive utilization. It discourages efficient use of the system by giving most consumers free choice of hospitals and physicians regardless of cost on the one hand, and limiting their options on using lower-cost alternatives on the other. In order to deal with some of the cost-inducing incentives of this system, several regulatory girdles have been developed: 1) certificate of need, together with health planning, to control unnecessary and duplicative capital investments which the reimbursement system finances and encourages; 2) utilization review to control inappropriate admissions and care; 3) rate regulation to conteract the lack of incentive in the system for efficiency improvements; and 4) expenditure containment on the part of the

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federal government to reduce what it recognizes as reimbursable costs, reduce benefits and reduce beneficiaries.

Rate regulation, can be seen then, as only part of a regulatory scheme to address the inadequacies of the reimbursement system. It does not change that system, nor does it address the effect of the growing need for service arising from the aging of our population or the public's demand for more services. Even assuming effectiveness of the entire regulatory scheme, of which it is a part, rate regulation in my opinion still will have only a very minor effect on the forces that are driving health care expenditures up. To the extent that it is viewed as a major solution by the public, Legislature and policy makers, the risk is that we will continue to postpone dealing with the fundamental causes, particularly reform of the reimbursement system.

Now let us turn to the potential impact of regulation on hospital expenditures and charges.

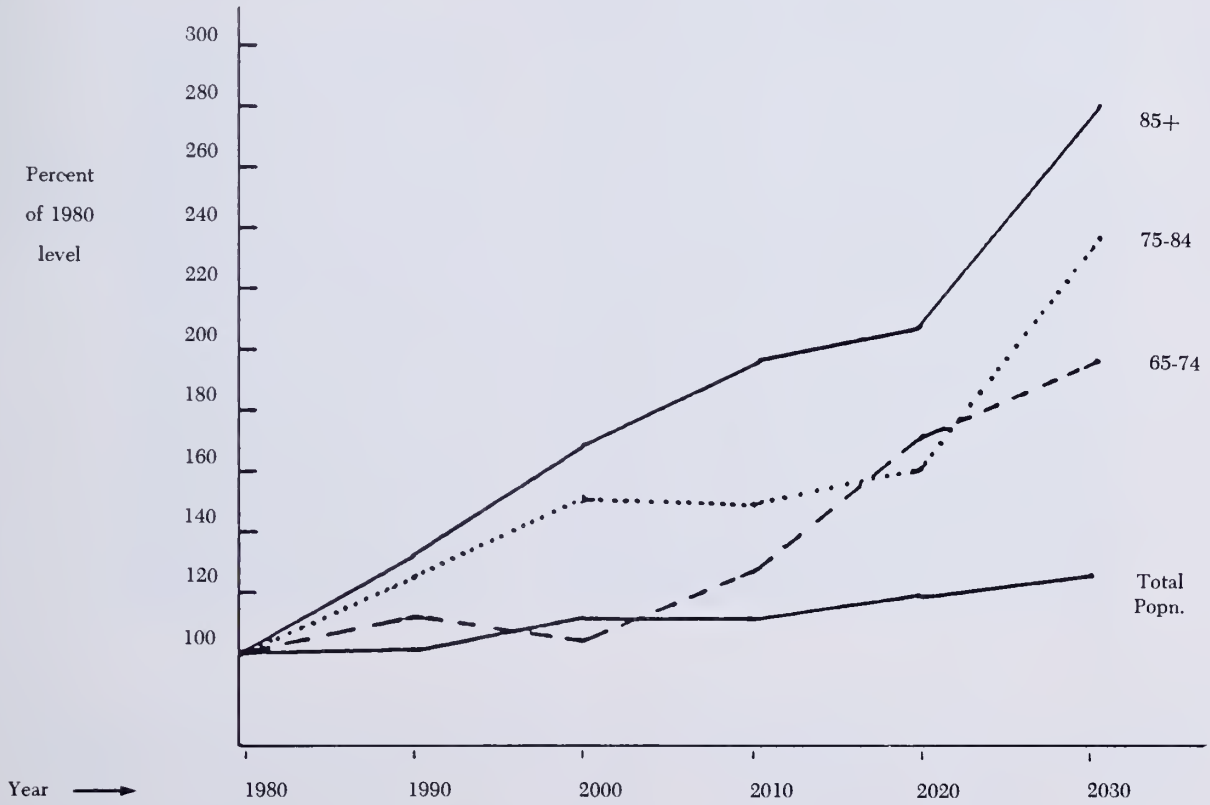
In addition to my concern about the panacea implications, I also have doubts about the effectiveness of regulation, and concerns about its long-range implications for the health care system. My doubts are not firm, but they point to some matters that I think need further exploration before the State buys into this effort. These doubts also identify areas that must be considered in the design of a regulatory program, if it is felt to be desirable.

Does Two Things

In terms of reducing expenditures for hospital care, rate regulation can at best do two things: 1) pevent unreasonable charges by those who abuse the opportunities provided by the present system, and 2) improve operating efficiencies. These also need to be put into perspective.

I think part of our perception of abuse derives from the relatively high rate of increase in charges made by hospitals relative to inflation. For example, in August of this year a record rate of annual increase was experienced — 28.8 per cent compared to a Consumer Price Index rate of only 9.6 per cent. There is a reason for this that goes back to the nature of the reimburse-

PROJECTED GROWTH OF ELDERLY POPULATION AGE GROUPS, 1980-2030

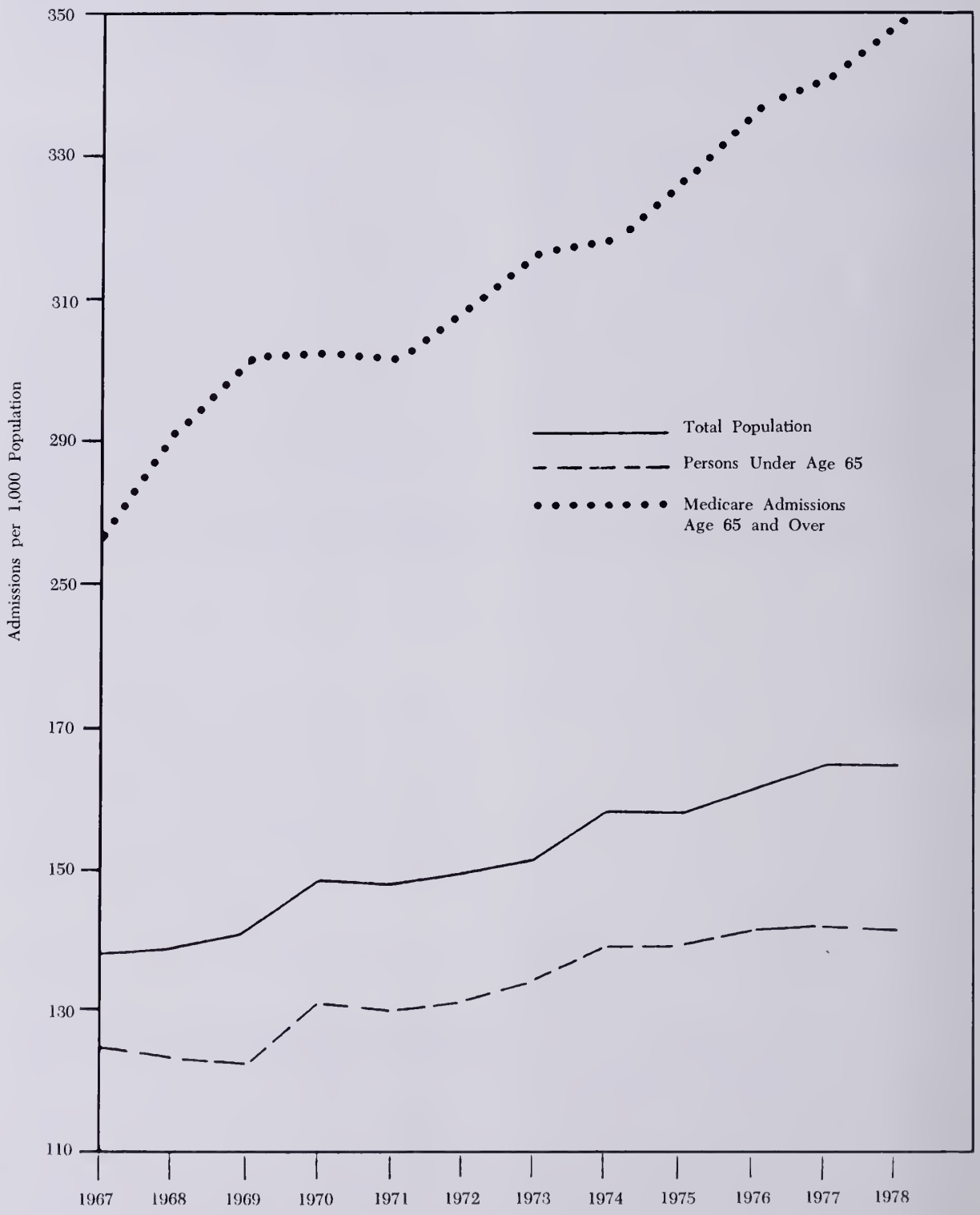


Source: U. S. Dept. of Health and Human Services, Health Care Financing Administration, *Long-Term Care: Background and Future Directions,* January, 1981, pg. 11.

Figure 1.

ment system and to the Federal Government's efforts at expenditure control.

As government tightens it regulations on what it recognizes as allowable costs and benefits and reduces its rolls of beneficiaries, an increasing share of a hospital's total expense must be shifted to its charge payers in order to maintain revenue to meet expenses. In the absence of any operat-



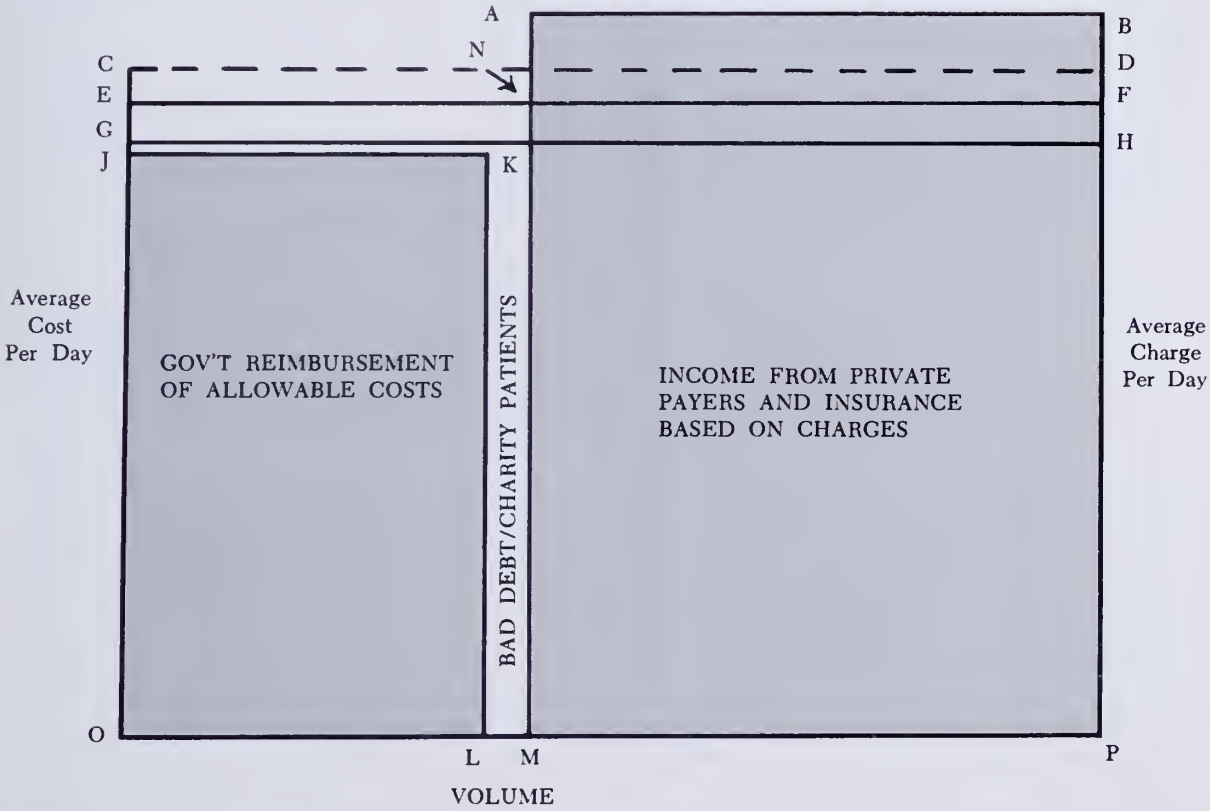
Source: Fisher, C. R.: "Differences by Age Group in Health Care Spending." *Health Care Financing Review, Spring* 1980, pg. 73.

Figure 2. Short-stay hospital admission rates for selected populations, years ending June, 1967-78.

ing cost increases, government's tightening of Medicare and Medicaid over the past few years would have caused increases in hospital charges (Figure 3). As I will discuss later, rate regulation could eliminate this income shifting, but that generates other implications for State Government.

I have strong suspicions that there are abusers whose charges generate excessive profits. Whether they represent a significant portion of the industry, I do not know. Overall, in this state, excess revenue over expense was four per cent of total patient revenue. Superficially, that does not appear excessive to me in light of the need for the system to generate funds for future replacement, modernization and some expansion. In any event, the potential for savings here is only a portion of the $28.7 million dollars of "profit" (1980), and that may be offset by legitimate revenue increases under regulation to those hospitals that are undercharging—of which there are some.

Another form of abuse widely perceived by the public is excessive salaries and benefits for administrative staff, and the very high incomes of hospital-based physicians such as anesthesiologists, radiologists, cardiologists and pathologists. I am as jealous of the salaries as any of you. I am not aware of any rate-regulating system that affects the charges of the hospital-based physicians who are not salaried by a hospital. While a program could and should be designed to close this loophole, I would foresee significant political problems in getting it passed. The degree to which administrative salaries and benefits can be affected depends on how the regulatory scheme is operated. If it involves detailed review, modification and approval of individual budgets, there may be some effect. If it involves control of revenue without intervention in management decisions, such as in Maryland, the effect probably will be minimal as the high-salaried management finds savings elsewhere.



GH = Expense after deduction of non-patient income and expenses.

JK = Allowable expense for reimbursement.

Box GHOP = Total expense.

Box EFOP = Total patient income = shaded areas.

Box EFHG = "Surplus" to meet other financial requirements.

Box ABFN = Unshaded area under line EF = amount of unreimbursed costs covered by charge payers. Need to increase ABFN is occuring as government pushes line JK down and line KL to left.

CD = Charge level with all payers paying same rate.

Figure 3. Relationship of hospital charges, expenses and income.

Improved Efficiency

The remaining potential impact of rate regulation then is improved hospital efficiency. Given the lack of incentive for efficiency in the reimbursement system, it would appear that the opportunity here is great. Implicit in the arguments of the effectiveness of rate regulation are "savings" derived from improved efficiencies. It is in the context of where these savings may actually be coming from that give rise to my doubts and concerns about rate regulation.

There are reasons to question effectiveness of rate regulation. Such effectiveness in the reports I have seen is measured by the difference in the rates of increase of unit costs (costs per admission and costs per patient day) in regulated and unregulated states. There is evidence that these unit costs have risen at a more moderate rate in regulated states. I do not doubt that there is an increase in cost consciousness on the part of hospitals having to deal with rate regulation that yields some savings. However, I think there is also evidence that indicates that the savings from rate regulation may not be as as significant as is implied in the growth rate differences.

Savings in terms of lower unit costs in part may be the result of increased utilization, i.e., more admissions. The four most stringently regulated states, and those cited as the most successful, Maryland, New York, New Jersey and Massachusetts, all experienced significant increases in utilization in the 1974-79 period relative to the nation (Table).

In order to maintain income in a regulated environment, hospitals and physicians may have altered their admission behavior in order to increase revenue. New York State found, for example, that its policy of penalizing institutions for low occupancy rates did increase utilization. Change of that policy probably accounts for the relative decline in utilization between 1977 and 1979. Regardless of regulation, one would expect an increase in utilization to result in a reduction of unit costs.

The reasons for the utilization increase should be explored to determine whether or not they are a response to regulation. If they are, they highlight the failure of the utilization review component of the regulatory scheme. Also, the combined effect of increased utilization and unit cost reduction needs to be assessed to determine how the rate of increase in total hospital expenditures was modified. There are no savings if regulation increases overall expenditures by promoting more admissions.

TABLE
Utilization Trends (Medicare)

	% Change Discharges Per 1000 Enrollees		*% Change Length of Stay*		*% Change Days of Care Per 1000 Enrollees*	
Regulated States	*74-77*	*74-79*	*74-77*	*74-79*	*74-77*	*74-79*
New York	11.0	11.6	–4.0	–8.2	6.5	3.4
Massachusetts	7.1	9.5	–1.9	–2.4	5.0	6.8
New Jersey	9.6	13.3	.8	–1.6	10.4	11.5
Maryland	13.1	20.7	–1.4	–3.2	11.5	16.9
Connecticut	6.4	7.6	–6.6	–10.2	–.6	–1.4
Washington	.8	.1	–2.5	.6	–1.7	.8
Rhode Island	7.4	11.5	–10.8	–11.7	–4.2	–1.5
Wisconsin	2.6	2.0	–9.0	–10.6	–6.7	–8.8
Unweighted Average	7.3	9.5	–4.4	–5.9	2.5	3.5
U. S. Average	6.6	8.8	–4.4	–8.6	.8	–.6
West Virginia	2.6	5.9	–7.9	–13.9	–5.5	–8.8
Region III States						
Maryland		20.7		–3.2		16.9
Pennsylvania		14.8		–8.6		5.1
Delaware		17.7		–10.8		5.0
Washington, D. C.		13.1		.6		12.8
Virginia		11.1		–11.6		–1.8
West Virginia		5.9		–13.9		–8.8
Regional Average		13.8		–8.6		4.0
U. S. Average		8.8		–8.6		–.6

More Moderate Rate

Accomplishment of some of the "savings" in the northeastern regulated states also may be due to the relatively more moderate rate of inflation in that part of the country. The lower rate of inflation in the Northeast could lead one to expect more moderate hospital cost increases in those states. Moderation of hospital charge increases in regulated states, however, also has a moderating effect on the inflation rate. The interaction of these forces needs further study.

What are some longer-range implications?

First, depending on the stringency and mode of regulation, reduction of an institution's working capital is another source of "savings." Eventual bankruptcy and closing of hospitals represent a real prospect. Hospitals serving a high proportion of low-income patients often have problems securing sufficient revenue where charges are regulated. New York State is finding it necessary to provide back-door subsidization to several critically needed bankrupt facilities. This could be a significant problem in West Virginia, where several hospitals are financially vulnerable.

A regulatory program that on the other hand assures hospitals revenue to meet their financial requirements could be a salvation to many facilities by legitimizing rate increases. This approach, however, reduces pressure on hospitals, those that need help as well as others. It is very difficult to be selective of individual facilities to be helped or pressured in regulation.

Second, revenue limitations which in effect constrain growth in working capital (or diminish capital) will hinder future ability to modernize and replace hospitals. It also will hinder future expansion which I think will be an inevitable need as the population over age 65 continues to grow.

Now let us look at implications for state expenditures.

First, equity of payment among all players is one of the principles promoted by those in favor of rate regulation. Equity of payment means all payers, including Medicaid, pay on the basis of the same charges. Medicare and Medicaid end up sharing with charge payers expenses associated with bad debts, charity and an institution's other financial requirements that they do not ordinarily cover. With Medicare and Medicaid paying charges (i.e., more), charges to other payors (e.g., insurance companies) can be reduced without affecting a hospital's income.

Benefits Insurance Companies

The theory is that with regulation the control of cost increases will more than compensate for increases in Medicare and Medicaid payments implicit in this revenue shift. This principle clearly benefits commercial insurance companies who strongly support regulation with equity of payments. The savings they will accrue by paying lower charges in West Virginia will be pure profit until, if ever, premiums (which are nationally rated) are adjusted. Hospitals also favor this principle, if there is to be regulation, because it moderates their need for the apparently excessive charge increases. In Maryland, equity did increase the state's Medicaid expenditures, and this past year the state ceased to pay on the basis of charges.

Equity of payment would benefit the state's public employees' health insurance program by reducing or moderating increases in charges. Whether these benefits would compensate for Medicaid expenditure increases should be explored. My first very rough guess is that Medicaid payments could increase by about 15 to 20 per cent, and charges to insurance companies and private payers decrease by about 10 to 15 per cent with equity.

Equity is not essential to rate regulation, but it is the absence of equity that creates problems for the Public Employees Insurance Board and for hospitals with a high proportion of low-income patients who end up as bad debt and charity cases.

Second, implicit in rate regulation is a much larger regulatory scheme that the state should be prepared to support since the present federal support of these activities is scheduled to be phased out. Its parts need to include: 1) utilization review and control to assure that inappropriate volume increases are not used by hospitals to compensate for the restrictions on revenues or charges; 2) certificate of need or something like it to sanction and control expansions and improvements to the system and the capital component of hospital expenses; and 3) a statistical and research component to evaluate effectiveness of the scheme and monitor what is happening to the health system. This will be needed for the next cost containment task force.

A message from . . .

The President

COCONUTS AND APPLES

The cost of medical services is on the minds of almost everyone today. The news media has a blitz of material telling all the world how expensive it is to become ill and receive medical care. Television ads show Burl Ives and others decrying that one day in a hospital costs more than a luxury room at one of the best hotels in Hawaii. The fact that this is comparing apples and coconuts seems to escape the authors of these ads, as well as many of the viewers, and in an attempt to sell insurance, many will say almost anything.

In Charleston, we are very "fortunate" to have a newspaper, the Charleston Gazette, whose publisher and editors remind us every day that the cost of medical care is soaring out of sight and reach. Their favorite comparison is the Greenbrier; they, too, seem to have trouble with coconuts and apples.

Oscar Wilde's Lord Darlington, in "Lady Windermere's Fan," defines a cynic as one who knows the price of everything and the value of nothing. Led by the Gazette's publisher and his editorial board, we have many true cynics here and throughout the country. How does one place a price on the value of life and the quality thereof? One cannot! What has happened, however, is that people have placed a great deal of value on material things, and feel that someone else should pay the price for life and health.

Since we are surrounded by cynics, we are forced to deal with them. We, too, must then be aware of price and cost even if we cannot equate the two with value. The cost of medical care is a problem for people in our state and this nation. As I have stated before, we as physicians are the access to medical care. We, therefore, control the cost of care to a great extent, even though we do not control the price of any facet of it, except our fees. We are, therefore, thrust into a role of cost-containers, one which we did not seek, but one that is properly ours.

We must make sure that every dollar spent for medical care is value received. We, through a voluntary effort, can be much more effective in cost containment than any task force appointed by the Governor, or by any bureaucracy that may be established by the Legislature. All bureaucracies have an enormous appetite to consume dollars and, since a large share of those dollars are our own tax dollars, we must assume our proper role. We must spend our patients' medical-care dollars to their best possible advantage.

If we can be only a portion as successful in controlling the costs as we have been in improving the health and the quality of life of our patients, we then will have truly served humanity in a way that no governmental agency could. Another aspect of our leadership role and responsibility. Accept it.

John B. Markey

John B. Markey, M. D., *President*
West Virginia State Medical Association

The West Virginia Medical Journal

Editorials

The Publication Committee is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author shall be held entirely responsible. Editorials printed in The Journal do not necessarily reflect the official position of the West Virginia State Medical Association.

ENDANGERED SPECIES

The Last of the Mohicans by James Fenimore Cooper, required reading for many a ninth grader a generation or two ago, chronicled the tragic end of a noble Indian tribe. The Great Auk, a now extinct, flightless bird, once swam in migratory hordes of millions from its Arctic summertime habitat to its winter haven in the Carolinas. The once-numerous carrier pigeons are gone and the whooping crane is on the verge of extinction.

Other Indian tribes survive, and we hardly lack for a variety of birds of widely divergent size, plumage, habits and habitats. These others are gone, however.

The solo-practicing, free-enterprise physician, along with his small-group cousin, could very well as these, be nothing more than a memory 20 years from now—perhaps sooner.

A number of things point in this direction. In recent issues, we have noted the coming glut of physicians in this country. Any alert observer of the medical system will already have noted the alacrity with which hospital administrators respond to any opportunity given them to employ a physician in any capacity.

It is of some significance that physician applicants are now available when salaried positions are offered. The size of the anticipated physician surplus suggests that the available stock of physician applicants for employed positions will do nothing but increase in the near future.

Money spent for medical care currently accounts for almost 10 per cent of the money spent in this country. As a business, medical care is rivaled only by the energy business. Is it any wonder then that other business interests should look with envious eyes at opportunities in the medical field?

Hospital administrators already are on the scene and seem to see themselves as merely a step or two ahead of Exxon, Sears and the like. They not only have something to protect, they also are in a position to see opportunities for expanding their share of the market.

It is hardly a secret that hospital emergency rooms now routinely care for more than just emergencies. They account for a yearly increasing share of the primary care business. Hospital administrators have an eye for vastly increased outpatient services with the establishment of satellite facilities throughout their drawing area.

Are closed hospital staffs on the horizon? That thought is not as farfetched as it was a year or two ago. HMOs or some form of prepaid medical care work much better with closed hospital staffs. Many current HMOs stagger on toward bankruptcy, avoiding that fate only by severly curtailing promised benefits. They well might fare better in an overcrowded physician market.

Interesting times lies ahead for Medicine. The machinery of change is in motion. Change presents opportunities for the venturesome even as it calls up pictures of disaster for the timid.

The deck certainly is not stacked against the physician by any means. We are not yet ready to be termed an endangered species. But to mix a series of metaphors, we cannot, like those now missing species, afford to wing or swim along happily and unknowingly in a great but diminishing flock as it is being decimated at the flanks. One of us could be left standing like poor, lonely Chingachgook, the last of his tribe.

GEORGE T. OLSON

Everyone knows that government bureaucrats are peculiar misanthropes who engage in a byzantine logic to arrive at all the wrong answers, right? They are the despicable adversaries plotting and scheming to confound the will of the electorate in that ceaseless struggle between the governed and those who govern, right? Well, uh—maybe not always.

What does George Olson, Director, Office of Health Planning and Evaluation, West Virginia Department of Health, think he is doing ruining perfectly good stereotypes like these? We refer

you to his scandalously honest and clear-thinking Special Article: Problems and Prospects In Hospital Rate Regulation (p. 70) as an example of the newest bureaucratic ploy to gain our favor.

All those accurate facts and figures examined and interpreted without preconceived prejudice and bias might fool some casual observer. But not us! We've been at this game too long. Honesty and candor! What diabolical tricks will they think of next?

If he thinks he will shut us up and lull us to sleep with tactics such as this, he is sadly mistaken. We're going to keep an eye on you, George. We'll see if you can keep it up, now that you've been exposed. The only thing that really worries us about the whole thing is that the idea might spread. Whom could we criticize then?

THIRD-PARTY PAYER

From time to time, physicians are urged to "cooperate" with third-party payers for reimbursement purposes in regard to medical services rendered to participants in particular health plans. The health plans urge that you bill the insurance carrier directly and accept their payment as "payment in full" for the particular services rendered. The problem is that the fee schedules are years behind and the percentage reimbursement is much lower than anticipated, so that in most cases the payment simply is not the amount desired.

I had a fantasy the other day about what would happen if other businesses were asked to be paid the same way. For example, let's say you were a road contractor who did a certain piece of road construction costing $17,000. You wanted $3,000 for your time and trouble (profit motive!!), so you billed the company for $20,000. O.K. so far, and your bill ordinarily would be paid promptly and in full ($20,000). But wait!!! This month, the XYZ Insurance Company, third-party payer for State Road Construction, takes over and assumes the burden of paying you!! Here's how their statement to you would look:

EXPLANATION OF BENEFITS	XYZ INSURANCE COMPANY
Billed	$20,000
Allowed (see item 5 on back)	$15,000
Less Annual Deduction	$ 6,000
Amount Approved	$ 9,000
Amount Paid at 80 per cent	$ 7,200
Check Enclosed	$ 7,200

Thus, your $20,000 would be reduced by 1) allowable amount for this service (see item 5 on back); 2) annual deductible, and 3) 80-per cent payment rate. Your $3,000 profit would end up as a net loss of $9,800 when reimbursed by the third-party payer XYZ Corporation. PLUS, you get paid five months late. So what does our Road Construction Company do? Three possibilities: 1) accept the fact and go bankrupt; 2) quit; or 3) bill the XYZ Corporation for $40,000 so that the paid amount is $20,000 and everybody is happy. Inflation in all things has to result.—*Echols A. Hansbarger, Jr., M. D., in St. Francis Hospital (Charleston) Clinical Laboratory Bulletin.*

OTHERS SPEAK

Unfortunately, there's little time for such an interlude—but an occasional check into what Presidents of other medical associations are saying in their respective medical journals can provide an interesting, informative and even challenging exercise.

Herman W. Heisterman, M.D., of Kansas commented recently that this day and age, expected to be one of enlightment, has become an age of utter confusion, at least when one speaks of medical information to the public.

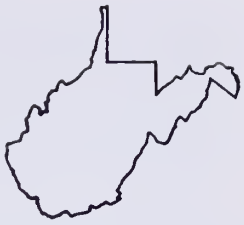
Every day, he said, people hear and see conflicting reports ranging from such topics as the causes and cures of cancer to the efficacy (or lack thereof) of Vitamin C. And he noted that the medical profession cannot stand entirely without blame for the prevailing situation.

For example, he observed, take the case of research papers. Results are released too early — prior to verification by other investigators, before sampling is statistically adequate or before all variables are evaluated properly. Later, as we so often see, all the excitement is found to be unwarranted, Doctor Heisterman suggested.

In such situations, loss of creditability is inevitable, the Kansas President said. The public can begin to think that the medical profession doesn't know what it's talking about, and as confusion becomes rampant, the public's confidence in medical advice will lessen, not only in what comes across the news media but also, Doctor Heisterman felt, in the one-to-one setting between doctor and patient.

When more people decide for themselves what is good advice and what is not, he continued, the charlatans and the super-advertisers will have their heyday. He noted recent suggestions that in a few years, patients might become physicians' greatest competitors—and he wondered if this might be beginning to happen.

GENERAL NEWS



Recent Urology Advances Convention Subject

An Ohio State University urologist will speak Saturday morning, August 28, during the 115th Annual Meeting of the West Virginia State Medical Association August 26-28.

Dr. Henry A. Wise II, Director and Associate Professor, Division of Urology, Department of Surgery at Ohio State will present a paper on "Recent Advances in Urology" at the second general scientific session, it was announced by the Program Committee.

Henry A. Wise II, M. D.

The convention again will be held at the Greenbrier in White Sulphur Springs.

Doctor Wise' discussion will include diagnosis of impotence; the treatment of urethral stricture disease; the treatment of prostate cancer with interstitial radioactive seeds; the treatment of superficial bladder cancer, and recent advances in the treatment of renal cancer.

Other topics for the Saturday morning scientific session—all to be tailored for a general audience—will cover new developments and/or trends in sports medicine, plastic surgery and neurology-neurosurgery.

The first general scientific session will be held Friday morning, August 27. As announced previously, Dr. Malcolm D. Graham from the University of Michigan will speak on "Dizziness: Current Thoughts on Diagnosis and Management" as part of a "Symposium on Common Disorders of the Eye, Ear and Mouth." Doctor Graham is Professor and Vice Chairman, Department of Otorhinolaryngology at the University.

Appointed in 1978

Doctor Wise was appointed Director of the Division of Urology at Ohio State in 1978. In addition to being Associate Professor of Surgery there, he is Associate Professor of Urology at Columbus (Ohio) Children's Hospital, Deputy Director of the Interdisciplinary Oncology Unit at Ohio State University Hospital and a member of the medical staffs at three other hospitals in the Columbus area.

Among a number of posts held by Doctor Wise are those as member of the Medical Advisory Board of the United Ostomy Association, Inc.; member of the Medical Advisory Board of the American Cancer Society; President of the Transamerican Urology Researchers, and Past President of the Central Ohio Urologic Society.

Born in New York City, he was graduated from the University of Virginia, where he also received his M. D. degree in 1964. He currently is a member of the Advisory Board of the Medical Alumni Association at the University.

Doctor Wise interned and took a residency in general surgery at Vanderbilt University Medical Center, and then completed a residency in urology at Johns Hopkins Hospital. He is certified by the American Urologic Association.

The Annual Meeting will open with a pre-convention session of the Association's Council and the first session of the House of Delegates on Thursday morning and afternoon, August 26; and end with the second and final House session and reception for the new Association officers on Saturday afternoon and evening.

AMA President Invited

About a dozen sections and affiliated societies will have business and scientific sessions on Friday and Saturday, primarily in the form of breakfast and luncheon meetings.

Dr. William Y. Rial of Swarthmore, Pennsylvania, who will be installed as the President of the American Medical Association in Chicago in June, has been invited to address the first House session on Thursday.

Opening convention exercises will precede the Friday morning scientific program.

Dr. Harry Shannon of Parkersburg, during the second House session on Saturday, will be inaugurated as President to succeed Dr. John B. Markey of Charleston.

(Continued on Next Page)

Serving on the Program Committee are Drs. Carl J. Roncaglione, South Charleston, Chairman; Jean P. Cavender, Charleston; Thomas P. Long, Man; David Z. Morgan, Morgantown; Kenneth Scher, Huntington, and Doctor Shannon.

The Annual Meeting of the Auxiliary to the State Medical Association, with Mrs. Logan W. Hovis of Vienna in charge as the Auxiliary's President, again will run concurrently with the Association's convention.

More specific information relative to other general session topics and speakers will be provided in upcoming issues of *The Journal.*

Disability Determination Questions, Answers

In West Virginia, the Division of Vocational Rehabilitation's Disability Determination Section is under contract with the U.S. Social Security Administration to perform disability determinations required for Social Security Programs.

Recent news stories about payments to out-of-state physicians for medical examinations required for Social Security purposes prompted questions from several State Medical Association members.

They also led to some in-depth discussions between Association and Disability Determination Section (DDS) representatives; and a letter by John B. Markey, M. D., the Association's President, to the membership explaining in detail concerns expressed and answers received. Doctor Markey also sought the help of additional West Virginia physicians in the DDS process.

There are two programs for which medical examinations are required — Social Security Disability Insurance benefits, and Supplemental Security Income payments. Following are some questions heard from physicians about disability determination, and answers as provided by DDS' Assistant Director, Anderson J. Allen.

Q. Why do West Virginia physicians get $6 or $8 when the doctors from Michigan get $60 for examinations?

A. All physicians can bill at their own figures. DDS fees are the same as the Division of Vocational Rehabilitation fees. Six to eight dollars was the fee we paid for abstracts several years ago. We currently reimburse physicians for the photocopies of their records, more for abstracts, and a customary and reasonable charge for examinations.

Q. Isn't the Panel a closed group?

A. No. We select the best qualified consultant examiners we can find, preferably board certified. We encourage *all* physicians to do examinations for us as long as they are qualified; submit sufficiently detailed findings as to function to permit DDS to determine if

Some 238 physicians and others attended the 15th Mid-Winter Clinical Conference held in Charleston January 22-24 by the State Medical Association and West Virginia University and Marshall University Schools of Medicine. In the left photo, Dr. John B. Markey (left) of Charleston, Association President, chats with Dr. Lewis N. Fox of MacArthur (Raleigh County) prior to the beginning of the Conference. In the center background is Dr. Everett B. Wray of Beckley. In the right photo, from left, are Drs. Stafford G. Warren of Charleston, first speaker for the opening session on heart disease; Joseph T. Skaggs (background), Charleston, Conference Co-Chairman, and R. Paul Bennett, Webster Springs.

a disability exists, and provide those reports within 10 days.

Q. Why haven't I been contacted by DDS?

A. Contacting physicians one at a time is extremely slow. We have asked many physicians to do examinations, and many board-certified West Virginia physicians currently do a number of examinations. We would prefer to use qualified in-state physicians who will work at the DVR fee level and provide timely, fully descriptive reports. The out-of-state physicians all are either board certified or board eligible, and provide extremely rapid reports. Some physicians who previously did occasional exams are no longer asked since their reports took too long to enable a timely decision on the client's application.

Q. Why do the standards of benefit eligibility seem to change from case to case?

A. It appears that way if you look only at the medically-established impairment. The claimant's age, work history and education also are taken into consideration as to whether or not he could be expected to hold a job. The medical aspects of residual functional capacity remains the same for all applicants.

Q. Why schedule an expensive specialist exam when the treating physician could give the same information with a little lab and x-ray work?

A. Precisely. We would greatly prefer and would be better able to operate within our budget if the treating physician will obtain the lab and x-ray work authorized, and perhaps make another brief examination of the functional limitation and give us the details about that limitation.

Q. Why is my professional opinion not sufficient to make a disability decision? I know when someone is disabled for work.

A. The basis for the disability decision must be based on facts and findings which will stand up in court and be agreed upon by *any* physician reviewer at the state, regional, federal or court hearing level. Opinions are sent back for more *factual* information. The AMA has given a definition to the effect that an "impairment" is medically determined, whereas a "disability" is an administrative decision. The Dictionary of Occupational Titles (DOT) lists 42,000 jobs. We're not deciding if a person can do the previous work, but if he or she can do any of the possible jobs.

Q. What can I do to help?

A. We ask that physicians wishing to provide the scientifically-skilled examinations required in a timely fashion please contact David H. Cleland, Medical Relations Officer, Disability Determination Section, 1206 Quarrier Street, Charleston, West Virginia, 25301. Telephone (304) 348-5340, extension 35.

Dr. Allen H. Schaeffer (left), Charleston, another speaker for the opening session on heart disease at the Mid-Winter Clinical Conference, talks with Dr. Joe N. Jarrett of Oak Hill following the session. The other two speakers for the first session shown in the center photo are Drs. Patrick L. Brown (left), Huntington, and Harry A. Bishop, Clarksburg. In the right photo, Dr. Donald S. Robinson (left), Huntington, answers questions from the audience following his presentation on food additives at the Friday evening, January 22, public session. With him is Dr. Warren Point, Charleston, who presided. Doctor Robinson also addressed physicians on food additives Saturday morning.

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1982, as compiled by Dr. Robert L. Smith, Assistant Dean for Continuing Education, and J. Zeb. Wright, Ph. D., Coordinator, Continuing Education, Department of Community Medicine, Charleston Division. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of The Journal.)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Morgantown, Charleston and Wheeling campuses. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, 3110 MacCorkle Avenue, S. E., Charleston 25304; Office of Continuing Medical Education. WVU Medical Center, Morgantown 26506; or, Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

March 19, Charleston, 9th Annual Newborn Day

March 26, Morgantown, Second Annual Infection Control Workshop

April 1, Charleston, Psychological Disorders in the Elderly

April 2-3, Morgantown, 18th Annual Cancer Teaching Days

April 23-24, Morgantown, Orthopedic Reunion Days

June 4-5, Morgantown, Anesthesia Update '82

June 5, Charleston, Ninth Annual Bert Bradford Wildwater Surgical Conference

June 11-12, Morgantown, Eighth Annual ENT Teaching Days

Regularly Scheduled Continuing Education Outreach Programs from WVU Medical Center/ Charleston Division

Buckhannon, St. Joseph's Hospital, 3rd floor, 3rd Thursday, 7-9 P. M.—March 18, "Oral Manifestation of Systemic Diseases," Jerry Bouquot, D.D.S.

April 15, "Substance Abuse: Food, Alcohol & Drugs," David K. Walker, M. D.

May 20, "Hypertensives and Cardiac Drugs; Interaction," Carl Malanga, Ph.D.

June 17, "Poison Control," Kathryn Sensabaugh, R. N.

Cabin Creek, Cabin Creek Medical Center, Dawes, 2nd Wednesday, 8-10 A. M.—March 10, "Common Endocrinological Problems," Richard Kleinmann, M. D.

April 14, "Treatment of Diet-Resistant Diabetes," Stephen Grubb, M. D.

Gassaway, Braxton Co. Memorial Hospital, 1st Wednesday, 7-9 P. M.—March 3, "Managing Trauma in the Small Hospital ER and During Transport," Paige Harbaugh, M. D.

Madison, Allied Health Room, Boone Career Center, West Madison, 2nd Tuesday, 7-9 P. M. —March 9, "Diagnosis and Treatment of Cardiac Arrhythmias," Maria Georgiev, M. D.

April 13, "Drug Therapy and Interaction in the Geriatric Patient," Robert Hoy, Pharm. D.

Oak Hill, Oak Hill High School (Oyler Exit, N 19) 4th Tuesday, 7-9 P.M.—March 23, "Anxiety: The Therapeutic Dilemma," David K. Walker, M. D.

Welch, Stevens Clinic Hospital, 3rd Wednesday, 11 A. M.-1 P. M.—March 17, "Rheumatology Update," Anthony DiBartolomeo, M. D.

April 21, "Thyroid Disease," Richard Kleinmann, M. D.

May 19, "Infectious Diseases in Children," Edwin Anderson, M. D.

Whitesville, Raleigh-Boone Medical Center, 4th Wednesday, 11 A. M.-1 P. M.—March 24, "Common Endocrinological Problems," Richard Kleinmann, M. D.

April 28, "Classification & Diagnosis of Diabetes Mellitus," Stephen Grubb, M. D.

May 26, "Diagnosis and Treatment of Chronic Alcoholism" (speaker to be announced)

Williamson, Appalachian Power Auditorium, 1st Thursday, 6:30-8:30 P. M.—March 4, "Obstetrics Update: Labor & Delivery," Robert Patchell, M. D.

April 1, "Eye Trauma," George Hamrick, M. D.

May 6, "Anxiety: The Therapeutic Dilemma," Sid Lerfald, M. D.

Pneumonia, Depression Among AAFP Meeting Topics

The Head of the Department of Infectious Diseases at The Cleveland Clinic Foundation and a family physician from Grover, North Carolina, will be among some 12 speakers scheduled for the 30th annual Scientific Assembly of West Virginia Chapter, American Academy of Family Physicians (AAFP).

The meeting will be held April 16-18 in Morgantown at the Lakeview Inn and Country Club.

Dr. Martin C. McHenry, who has held the Cleveland Clinic position noted above since 1972, will speak on "New Pathogens in Community-Acquired Pneumonia" during the Friday morning, April 16, session; while the North Carolina family physician, Dr. Joseph H. Talley, will talk on "Depression as Seen by the Family Practitioner" that afternoon.

Scientific sessions also are scheduled for Saturday morning, Saturday afternoon and Sunday morning.

Doctor McHenry also is Associate Clinical Professor of Medicine at Case Western Reserve University School of Medicine in Cleveland, and Associate Visiting Physician, Department of Medicine, Cleveland Metropolitan General Hospital.

M. C. McHenry, M. D., M. S.

Joseph H. Talley, M. D.

He is Chairman of the Section of Infectious Diseases and Antimicrobial Agents, American Society of Clinical Pharmacology and Therapeutics; and a former Chairman (1975-77) of the Committee on Cardiopulmonary Infections, American College of Chest Physicians.

Doctor Talley serves on the Board of Editors of *Patient Care*, and is Clinical Assistant Professor, Family Practice, University of North Carolina, Chapel Hill.

He was recertified in Family Practice in 1978.

His special professional interests include management of depressive illness, office counseling, snakebite and spider bite, and antibiotic usage.

(Continued on Next Page)

In the left photo, Richard H. Kiley, Jr., Ph.D. (standing), Elkins, Saturday morning Mid-Winter Clinical Conference speaker on problems of the elderly, applies tape, grease-covered goggles and other paraphernalia to volunteers to simulate being elderly. The volunteers, from left, are Dr. Greenbrier Almond, Buckhannon; Sibyl Harouff, R.N., Charleston Area Medical Center, Geriatric Education; and Dr. Robert H. Waldman, Morgantown, who presided. On the right, the two speakers on coal workers pneumoconiosis for the Saturday afternoon session on medical controversies are shown with Dr. Maurice A. Mufson (left), Huntington, presider. They are Drs. Donald L. Rasmussen (center), Beckley, and N. LeRoy Lapp, Morgantown.

Other Subjects

Other subjects to be discussed during the AAFP Assembly will include multiple risk factor intervention trial (MRFIT); estrogen therapy; hypertension; allergy update; anxiety; diabetes in the elderly; inflamatory and non-inflamatory arthritis; use of drugs; epilepsy; and coronary spasm—calcium antagonist.

For a complete list of speakers and topics, see article in the February issue of *The Journal.*

The AAFP House of Delegates will hold a luncheon meeting on Friday, and the Board of Directors will meet for dinner on Thursday, April 15, and for lunch on Sunday. A golf tournament also will be conducted on Thursday.

Registration and other information may be obtained by calling (304) 776-1178.

Review A Book

The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal*, Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication.

General Urology, 10th Edition, by Donald R. Smith, M. D. 598 pages. Price $19.50. Lange Medical Publications, Los Altos, California 94022. 1981.

Current Medical Diagnosis & Treatment 1982, by Marcus A. Krupp, M. D.; and Milton J. Chatton, M. D. (with associate authors). 1,113 pages. Price $23. Lange Medical Publications, Los Altos, California 94022. 1982.

Doctor Davis Appointed

Dr. Del Roy R. Davis of Kingwood recently was appointed to the Publication Committee of the American Academy of Family Physicians (AAFP). The Committee is in charge of all official publications of the Academy, the principal ones being *American Family Physician* and the *AAFP Reporter*. The committee also reviews all editorial policies and the advertising acceptance policies of *American Family Physician.*

Doctor Flood, Past President Of Association, Dies

Dr. Richard E. Flood of Weirton, President of the State Medical Association in 1966-67, died of a heart attack on February 7 at his home there. He was 66.

Doctor Flood, since 1969, was one of the Association's two Delegates to the American Medical Association, and had been active in organized medicine for many years.

Richard E. Flood, M. D.

A family physician and surgeon, Doctor Flood served as President of the Federation of State Medical Boards of United States, Inc., in 1978, and was a member of the Federal Licensing Examination (FLEX) Committee. He served two terms (from 1969 to 1979) on the West Virginia Board of Medicine (formerly the Medical Licensing Board of West Virginia).

Doctor Flood, President of the West Virginia Chapter of the American Academy of Family Physicians in 1972-73, was a Clinical Professor in the Department of Family Practice at the West Virginia University Medical School.

He practiced in Weirton some 35 years, and was a member of the staff of Weirton General Hospital and Director of the hospital's Family Practice Education Program.

Doctor Flood served for four years on the Association's Council and, during his tenure as President, presided over the Centennial Anniversary of the Association. He had been Chairman of the Association's Nurses Liaison Committee and Resolutions Committee since 1971.

AMA Appointments

His AMA appointments included those as a member of the Committee on Nursing, Committee on Medical Options, and Committee on Membership Opinion Polls. He was Chairman of the Credentials Committee at the June, 1978, AMA Annual Meeting in St. Louis.

He was a member for several years of the National Joint Practice Commission between Medicine and Nursing.

Born in Glendale, Pennsylvania, Doctor Flood moved with his family to Weirton in 1917. He attended the University of Notre Dame, earning a B.S. degree in biology in 1937. He received

his M. D. degree in 1941 from Jefferson Medical College in Philadelphia, interned at Harper Hospital in Detroit, and was a surgical associate of Dr. Clark D. Brooks of Detroit in 1942.

During World War II, Doctor Flood served for 42 months in the Medical Corps of the United States Army in England and Africa and the South Pacific. He was discharged in 1946 with the rank of major and began private practice in Weirton.

He was a member and former President (1951) of the Hancock County Medical Society, and a member of the West Virginia State Medical Association and the American Medical Association.

Contributions may be made to the Fahey and Flood Scholarship Fund at West Virginia Northern Community College in Weirton.

Surviving are a sister, Estelle R. Flood of Weirton; two nieces, Mary Jane Fahey of New York City and Mrs. Lester Murphy of San Diego, California, and one nephew, William T. Fahey II of Weirton.

Discussing the program for the Mid-Winter Clinical Conference in the left photo are Drs. Peter C. Raich (left) and D. Franklin Milam, both of Morgantown. Doctor Raich was the presider, and Doctor Milam a speaker, for the prostatic carcinoma portion of the Saturday afternoon session on controversies in medicine. In the right photo, Dr. F. Vivan Lilly (left), Beckley, has a conversation with Dr. John B. Haslam, Charleston, the other speaker on prostatic carcinoma.

Speakers on high-risk mothers and high-risk infants, respectively, during the Sunday morning session of the Mid-Winter Clinical Conference were Drs. Juan L. Granados, Morgantown, and Herbert H. Pomerance, Charleston. In the left photo are, from left, Dr. W. Gene Klingberg, Morgantown, who presided, and Doctors Granados and Pomerance. In the right photo are the final two Conference speakers (from left), Drs. Stanley R. Shane, Morgantown, on treatment of thyroid disorders, and Richard E. Kleinmann, Charleston, diagnosis of thyroid disorders. With them is Dr. Bruce S. Chertow, Huntington, who presided.

New Monitoring System Using Telephones Launched

The socioeconomic monitoring system, a speedier method of gathering and reporting changes in many aspects of physicians' practices, has been launched by the American Medical Association. The system substitutes periodic telephone interviews with randomly-selected physicians for annual mail questionnaires, the principal device used to gather socioeconomic information since 1966.

The new system will yield information in about 10 weeks instead of the 12 months required to gather and analyze mail survey forms. It will provide the AMA with the capability to update socioeconomic data on a quarterly basis.

The Socioeconomic Monitoring System (SMS) program includes four surveys—an annual core survey and three supplemental quarterly surveys. The annual survey will accumulate data on a full range of economic and practice characteristics from 4,000 physicians. The quarterly surveys, based on interviews with about 1,200 physicians, will focus on a limited range of rapidly changing characteristics—fees, utilization of services, productivity, expenses, and income. Special questions on emerging topics will be incorporated as needed.

Survey results will be widely disseminated through articles in AMA publications and in regularly scheduled "SMS Reports."

AMA Physicians' Placement Registers Available

The American Medical Association's two placement registers are being published bimonthly effective with the February issues. The "Opportunity Placement Register" lists more than 1,100 medical practice opportunities for physicians. The "Physician Placement Register" lists 1,700 physicians looking for new positions.

For the past four years, the registers, which are the key to the AMA Physicians' Placement Service's computerized information bank, have been published quarterly. The February registers are now available. For more information, contact Physicians' Placement Service, AMA Headquarters, (312) 751-6282.

Medical Meetings

March 1-3—Southeastern Surgical Conference, Bal Harbour, Fla.

March 1-3—NIH Consensus Development Conference on Total Hip Joint Replacement, Bethesda, MD.

March 3-8—International Conference of the Assn. for Children & Adults With Learning Disabilities, Chicago.

March 4-6—Am. College of Obstetricians & Gynecologists, Big Sky, MT.

March 5—Impaired Health Care Professionals (Am. Society of Law & Med., MI State Med. Society, etc.), Detroit.

March 5-7 — Cardiovascular Disease Epidemiology (Council on Epidemiology, Am. Heart Assn.; & National Heart, Lung & Blood Institute), San Antonio.

March 5-10—Am. Society of Abdominal Surgeons, Las Vegas.

March 17-20—Neurosurgical Society of Am., Marco Island, Fla.

March 20-25—Am. Academy of Pediatrics, Honolulu.

March 21-25—Am. Fertility Society, Las Vegas.

April 14-16—Am. Society for Artificial Internal Organs, Inc., Chicago.

April 16-18—WV Chapter, AAFP, Morgantown.

April 22-23—WV Chapter, Am. Academy of Pediatrics, Morgantown.

April 25-27 — Am. Society of Clinical Oncology, St. Louis.

April 25-29—Am. College of Cardiology, Atlanta.

April 26-29—Am. College of Obstetricians & Gynecologists, Dallas.

May 2-5—WV Academy of Ophthalmol. & Otolaryngol., White Sulphur Springs.

May 5-6—Am. Society for Head & Neck Surgery, Palm Beach, Fla.

May 10-14 — Am. Roentgen Ray Society, New Orleans.

May 13-16 — Federation of State Medical Boards, New Orleans.

May 16-20—Am. Urological Assn., Kansas City, Mo.

May 21-22 — Phacoemulsification-Extracapsular/Posterior Chamber Implant (Blaydes Foundation), Bluefield.

June 13-17 — Annual Meeting of AMA House of Delegates, Chicago.

June 13-18—2nd. Annual School on Behavioral Health Studies (WV Dept. of Health, etc.), Morgantown.

Aug. 26-28—115th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Sept. 30 - Oct. 2 — Women's Health Conference (WVU), Morgantown.

Oct. 4-7—AAFP, San Francisco.

Oct. 30-Nov. 2—Southern Med. Assn., Atlanta.

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WVU Medical Center
–News–

Compiled from material furnished by the Medical Center News Service, Morgantown, W. Va.

WVU Researchers Develop Oral Flu Vaccine

Researchers at WVU Medical Center have developed an oral flu vaccine which they say has fewer side effects and might be as effective as an injected one.

Robert H. Waldman, M. D., Chairman of the Department of Medicine, said development of the oral vaccine was a cooperative project between the Section of Infectious Diseases and the WVU School of Pharmacy.

He also said that to his knowledge it was the first use of an oral influenza vaccine of this type.

Results of tests on 24 volunteers at the Medical Center were presented by second-year medical student Valerie Lazzell at a meeting of the Southern Society for Clinical Investigation on January 16 in New Orleans.

Ms. Lazzell, along with Dr. Catherine J. Rose, a 1981 graduate of the WVU School of Medicine and currently a resident in pediatrics at the University of California in San Diego; Dr. Rashida Khakoo, Associate Professor of Medicine, and Doctor Waldman were involved with testing the vaccine. Stephen A. Howard and Arthur I. Jacknowitz, Associate Professors of Pharmacy, formulated the capsules.

"We couldn't have done it without the School of Pharmacy," Doctor Waldman said. "It was important to have a capsule which would dissolve in the intestine . . ."

He said the volunteers were divided into three groups of eight each for the double-blind study. One group was given oral vaccine; the second, injected vaccine, and the third, placebo. All three groups received capsules and an injection, but only two groups got active vaccine.

Doctor Waldman said duration of immunity resulting from the oral vaccine would be determined by further research.

Streptokinase Infusion Used On First State Patient

A 56-year-old Preston County great-grandmother has made medical history in West Virginia.

Sally Greathouse is the first heart attack patient in the state to have a life-threatening coronary blood clot dissolved in order to reduce heart muscle damage.

The procedure, done recently at WVU Hospital, involves threading a catheter tube to the point of blockage and injecting an enzyme which dissolves the blood clot.

The procedure is still in the investigative stage and must be done within one to six hours after the heart attack to be effective, according to Alan K. Tannenbaum, M. D., Assistant Professor of Medicine and principal investigator.

Mrs. Greathouse, who lives in a rural area near Masontown and is a light machine operator at a Morgantown factory, was stricken last October 20 after returning home from work and having dinner with her family.

Blood Clot Revealed

Cardiac catheterization showed that a blood clot was blocking a major artery supplying the heart muscle, and Mrs. Greathouse's family gave permission for streptokinase infusion to be used.

Candidates for the procedure are selected from those patients diagnosed by electrocardiogram in the emergency room or those who suffer heart attacks while hospitalized. Cardiologists decide whether the patient is suitable, and the option is presented to the patient or to family members.

Use of streptokinase to dissolve clots in the coronary arteries was begun in Europe. Doctor Tannenbaum noted that the procedure has been in use at several major U.S. medical centers during the past two to three years, but is still experimental.

The success rate for the procedure is more than 80 per cent, depending on how soon the patient comes into the hospital.

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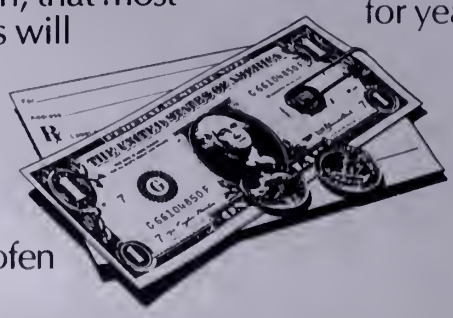

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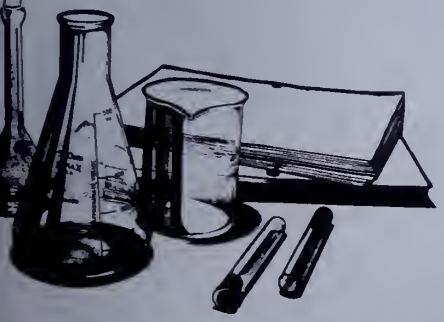

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WARNINGS: Anaphylactoid reactions have occurred in patients hypersensitive to aspirin (see CONTRAINDICATIONS). Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Peptic ulceration, perforation, or gastrointestinal bleeding can end fatally; however, an association has not been established. Rufen should be given under close supervision to patients with a history of upper gastrointestinal tract disease, and only after consulting the ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be attempted. If Rufen must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

PRECAUTIONS: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If developed, discontinue Rufen and administer an ophthalmologic examination.

Fluid retention and edema have been associated with Rufen; caution should be used in patients with a history of cardiac decompensation.

Rufen can inhibit platelet aggregation and prolong bleeding time. Use with caution in patients with intrinsic coagulation defects and those taking anticoagulants.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy, this therapy should be tapered slowly when adding Rufen.

DRUG INTERACTION: *Coumarin-type anticoagulants.* The physician should be cautious when administering Rufen to patients on anticoagulants.

Aspirin. Concomitant use may decrease Rufen blood levels.

PREGNANCY AND NURSING MOTHERS: Rufen should not be taken during pregnancy nor by nursing mothers.

ADVERSE REACTIONS

Incidence greater than 1%

Gastrointestinal: The most frequent adverse reaction is gastrointestinal (4% to 16%). Includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of GI tract (bloating and flatulence). **Central Nervous System:** dizziness*, headache, nervousness. **Dermatologic:** rash* (including maculopapular type), pruritus. **Special Senses:** tinnitus. **Metabolic:** decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

*Incidence 3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: gastric or duodenal ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** depression, insomnia. **Dermatologic:** vesiculobullous eruptions, urticaria, erythema multiforme. **Special Senses:** amblyopia (see PRECAUTIONS). **Hematologic:** , leukopenia, decreased hemoglobin and hematocrit. **Cardiovascular:** congestive heart failure in patients with marginal cardiac function, elevated blood pressure.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** paresthesias, hallucinations, dream abnormalities. **Dermatologic:** alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** hemolytic anemia, thrombocytopenia, granulocytopenia bleeding episodes. **Allergic:** fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** gynecomastia, hypoglycemia. **Cardiovascular:** arrhythmias (Sinus tachycardia, bradycardia, and palpitations). **Renal:** decreased creatinine clearance, polyuria, azotemia.

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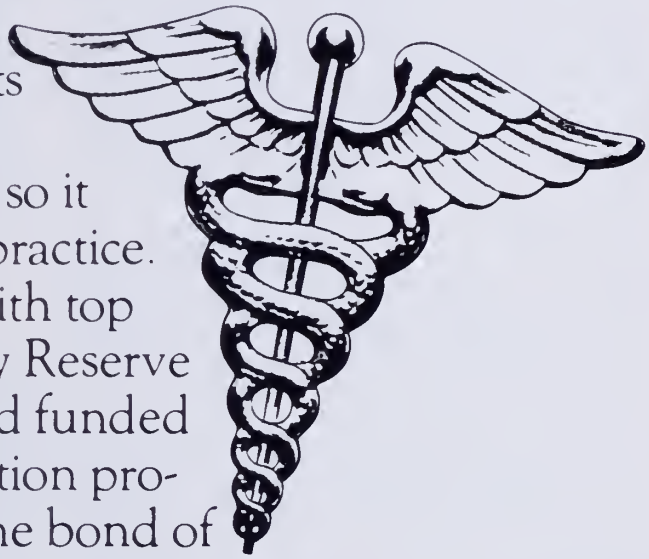

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Third-Party News, Views and Program Concerns

AMA In Coalition To Tackle Costs, Quality, Access

The American Medical Association joined five other national organizations in endorsing the concept of voluntary local coalitions to tackle the problems of health eare costs, quality and access. The joint statement, which was issued at a recent Washington, D. C., press conference, was endorsed by the AMA House of Delegates at the 1981 Interim Meeting.

In addition to the AMA, organizations involved are the American Hospital Association, Blue Cross and Blue Shield Associations, Business Roundtable, Health Insurance Association of America, and America Federation of Labor and Congress of Industrial Organizations.

The new emphasis on private solutions and the withdrawal of federal funding in health were cited as major factors in the encouragement of coalitions by John Dunlop, Harvard University professor and coordinator of the national effort. He said the six organizations "seek to encourage and to assist the efforts in a growing number of local communities in which local affiliates of the national organization have joined together voluntarily to put into effect common programs for utilization review, facility and technology review and planning, and other aetivities most appropriate to the particular locality to restrain cost increases while recognizing an appropriate concern over quality and access to health care."

'Totally Different' Than VE

AMA Executive Vice President James H. Sammons, M. D., told the news conference that the primary focus of the coalitions is to determine what the problems of the local area are and to come up with programs for dealing with them. He described the coalition movement as "a totally different" activity than the Voluntary Effort, which is a national program to restrain cost increases.

The statement urges local eoalitions to analyze their resources and establish projects to seek solutions. As high-priority projects, the statement cites efforts to place less emphasis on inpatient technology and greater emphasis on alternative forms of care, including ambulatory and home care; efforts to provide care for the unemployed and others without access and to mitigate the impact of federal and state budget changes; efforts to increase opportunities to discuss and develop the most cost-effective and equitable forms of provider payment; and efforts to develop more effective programs of health promotion and disease prevention at the work place.

Medical Examiners Needed By Compensation Fund

The West Virginia Workmen's Compensation Fund continues to seek help from physicians in the fields of general surgery, orthopedics, neurosurgery, dermatology and eye, ear, nose and throat in establishing a statewide roster of Workmen's Compensation Medical Examiners.

Additional physicians willing to do examinations will relieve the burden now placed upon those the Fund said "are conscientiously trying to keep up with the increasing demand for medical examiners."

The Fund makes payment to physicians based upon usual and customary charges for examination with report. All ancillary services necessary to complete the examination also are paid on a basis of usual and customary charges.

Physicians interested in helping the Fund increase its roster of examiners are requested to contact John Farley, Director of Claims Management Division, or Joseph I. Stone, Administrative Assistant, Claims Management Division, Workmen's Compensation Fund, State Capitol, Charleston 25305. Telephone 348-0065.

Farley and Stone have met with some of the component societies and other groups regarding the need for examiners, and other issues related to Workmen's Compensation. They remain available to meet with individual physicians or medical groups desiring general information about the Fund, or to discuss specific problems.

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James W. Banks, M. D.
F. James Meadows, P. A.

FAMILY PRACTICE
Joseph E. Shaver, M. D.

OBSTETRICS/GYNECOLOGY
E. T. Cobb, M. D.
James L. Pfeiff, M. D.

EAR, NOSE & THROAT
Amir A. Alidina, M. D.

OPHTHALMOLOGY
Robert K. Scott, II, M. D.

PEDIATRICS
Williams S. Dukart, M. D.
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Morgan E. Scott, M.D.
Don L. Weston, M.D.
Davis G. Garrett, M.D.
D. Wilfred Abse, M.D.
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Saint Albans Psychiatric Hospital
Radford, Virginia 703-639-2481

Obituaries

JOHNSEY L. LEEF, M. D.

Dr. Johnsey L. Leef, Richwood general practitioner since 1943, died on January 19 at his home there. He was 63.

Doctor Leef, who served with the U. S. Army Medical Corps during the Korean War, was affiliated with General Division, Charleston Area Medical Center.

Born in Grassy Meadows (Greenbrier County), Doctor Leef was graduated from Marshall University, attended the West Virginia University School of Medicine, and received his M. D. degree in 1942 from Temple University. He interned at the former Charleston General Hospital, and served his residency at McClung Hospital in Richwood.

He was a member of the Central West Virginia Medical Society, West Virginia State Medical Association and American Medical Association.

Survivors include the widow; a son, Dr. Johnsey L. Leef, Jr., of Charleston, and three sisters, Mrs. Enid Andrews of South Point, Ohio; Mrs. Evelyn Elliott of Covington, Kentucky, and Mrs. Mildred Burns of Crawley (Greenbrier County).

* * *

JOHN P. BRICK, M. D.

Dr. John P. Brick of Charleston died on January 20 in a hospital there. He was 71.

A native of Charleston, Doctor Brick was a retired staff member of several hospitals in the Charleston area.

He was a graduate of West Virginia University and was one of the organizers of the Alpha Epsilon Delta honorary pre-medical fraternity. He received his M. D. degree in 1936 from Rush Medical School in Chicago.

Doctor Brick interned and completed a residency in orthopedic surgery at the former Charleston General Hospital.

A U. S. Army veteran of World War II, he was an honorary member of the Kanawha Medical Society, West Virginia State Medical Association and American Medical Association.

Surviving are the widow and a daughter, Mary Jo Brick of Charleston.

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County Societies

CABELL

The Cabell County Medical Society met on December 12 at the Guyan Country Club.

Dr. John B. Markey of Charleston, President of the State Medical Association, gave a brief talk on the purpose of local and state medical societies and the physician's role in health care.

The Society met again on January 14 at the Gateway Holiday Inn in Barboursville.

The guest speaker was Charles R. Lewis of Charleston, Executive Secretary of the State Medical Association, who gave an informative talk on pending state legislation affecting physicians.

Other guests were Gene Soltis, Administrator of St. Mary's Hospital, and John Zink, Administrator of the Family Care Outpatient Center. — Maurice A. Mufson, M. D., Secretary.

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Book Review

THE CHEMISTRY OF HUMAN BEHAVIOR —Herbert L. Meltzer, Ph.D. 261 pages. Price $17.95. Nelson-Hall, Publishers, 325 W. Jackson Boulevard, Chicago, Illinois 60606. 1979.

This is a book about the brain, how it is structured, what chemical events occur within it, how its complex organization is related to its functions, and how we now are beginning to scratch the surface towards understanding the chemical and neurophysiological origins of thought and emotion.

Doctor Meltzer observes that scientists are led to believe that the basic working apparatus of the human mind is no larger than molecules; and that present knowledge about the brain has been inferred from experiments on animals.

The book has three main parts, with Part I covering the chemical organization and growth of the brain, including its physical structure; Part II, information processing and chemical communication between neurons, memory storage and retrieval; and Part III, "Chemistry and Uncontrolled Behavior," both the chemical and genetic aspects of mental illness.

In Part I, the author, who received his doctorate from Columbia University, and, since 1950, has served as a research scientist in neurochemistry at the New York Psychiatric Institute, describes how particular chemicals stimulate specific parts of the mind to induce thirst, hunger and depression. He points out that the brain utilizes 10 per cent of the body's energy, and that its proper development is dependent upon a well-rounded diet of nutrients and vitamins.

In Part III, he illustrates how equally-competent authorities might, on one hand, classify a particular patient as "schizo-affective" while another might term this same individual a "manic-depressive;" the differing diagnoses and prognoses can result from the varying significance assigned to the symptoms.

In discussing alcoholics, Meltzer comments that the only available modes of caring for them are exhortation, punishment or aversive behavior modification.

It is a most interesting book of 247 pages intended for the informed layman as well as general practitioner. The first section contains two drawings: one, of the structure of the human brain and, the other, a diagram of an axodendritic synapse. He also uses charts and tables in the remainder of the book. —Robert J. Wilkinson, Jr., Ms.D.

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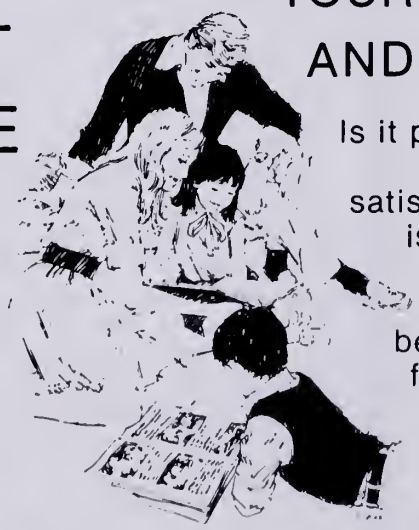

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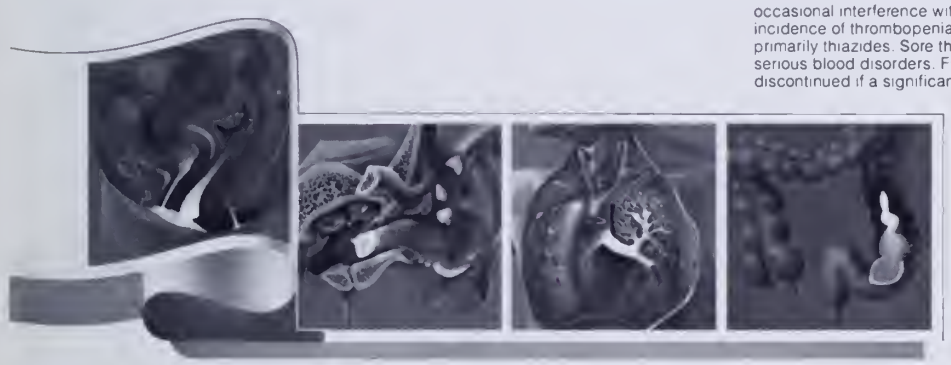

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1. Rubin RH, Swartz MN: *N Engl J Med* 303:426-432, Aug 21, 1980. 2. Data on file, Medical Department, Hoffmann-La Roche Inc.

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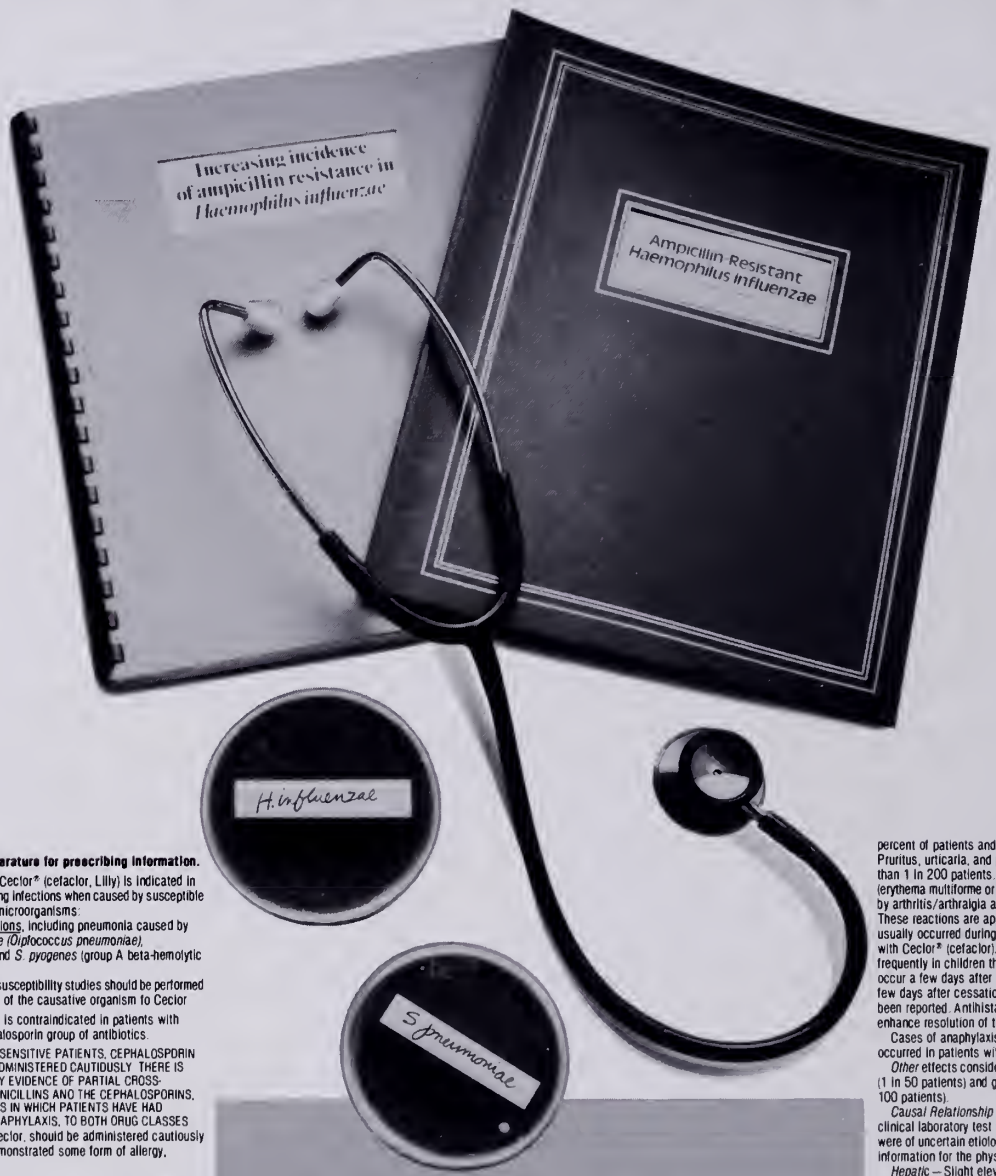
April 1982

An added complication... in the treatment of bacterial bronchitis*



Some ampicillin-resistant strains of Haemophilus influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-6]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

Ceclor®
cefaclor

Pulvules®, 250 and 500 mg

Brief Summary.
Consult the package literature for prescribing information.

Indications and Usage: Ceclor* (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae)*, *Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci).

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Precautions: If an allergic reaction to cefaclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of cefaclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such a condition, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest* tablets but not with Tes-Tape* (Glucose Enzymatic Test Strip, USP, Lilly).

Usage in Pregnancy—Although no teratogenic or antifertility effects were seen in reproduction studies in mice and rats receiving up to 12 times the maximum human dose or in ferrets given three times the maximum human dose, the safety of this drug for use in human pregnancy has not been established. The benefits of the drug in pregnant women should be weighed against a possible risk to the fetus.

Usage in Infancy—Safety of this product for use in infants less than one month of age has not been established.

Adverse Reactions: Adverse effects considered related to cefaclor therapy are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70) and nausea and vomiting (1 in 90).

As with other broad-spectrum antibiotics, colitis, including rare instances of pseudomembranous colitis, has been reported in conjunction with therapy with Ceclor.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor* (cefaclor). Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic—Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200). [100281R]

*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.[8]

Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

References

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8. Principles and Practice of Infectious Diseases (edited by G.L. Mandell, R.G. Douglas, Jr., and J.E. Bennett), p. 487. New York: John Wiley & Sons, 1979

Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285

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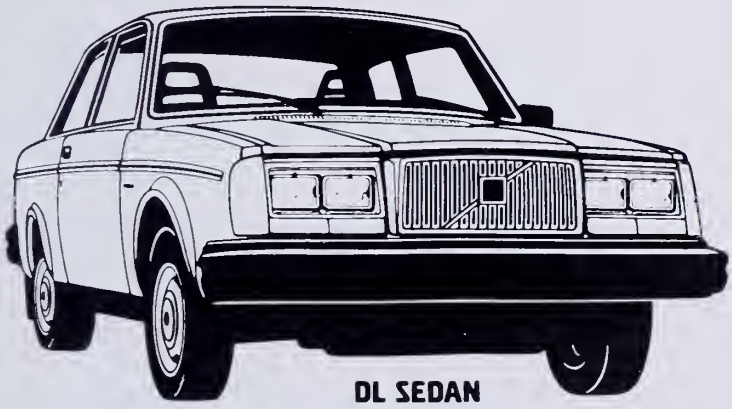

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PRESS RELEASE

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New Medicare Guidelines for Home Oxygen

1) Arterial blood gases must be done for all home oxygen patients. These studies must be done on room air and reflect a pO_2 of 62 or below.
2) Severe Chronic Congestive Heart Failure (CHF) will be the only acceptable cardiac diagnosis that will be considered.
3) Diagnostic classifications must fall in one of the following categories:

   A) Chronic Obstructive Lung Disease
      1) Limited to Emphysema, Chronic Bronchitis, and Bronchiectasis.
   B) Chronic Interstitial Pneumonia
   C) Chronic Interstitial Pulmonary Infiltrate-type Pulmonary Diseases such as Pulmonary Fibrosis from extensive Tuberculosis, Eosinophilia Granuloma, Idiopathic Fibrosis, and Pneumoconiosis.
   D) Pulmonary Hypertension
   E) Secondary Polycythemia

4) Medicare regulations specifically prohibit the coverage of pre-set stand-by or emergency oxygen.
5) Portable oxygen units will only be considered if the person is immobile without the use of mechanical oxygen.

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J-9043-4 July 1981

The West Virginia Medical Journal

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- **100% cure rate with Tegopen®** (cloxacillin sodium)
- **only a 60% cure rate with penicillin V-K**

As seen on admission

After one week of penicillin V-K therapy

Two weeks after initiation of TEGOPEN therapy

Treatment failure was judged to have occurred when lesions increased in size and/or number during the initial week of treatment with penicillin V-K. *No* treatment failures occurred with Tegopen.

*Data on file, Bristol Laboratories.

Brief Summary of Prescribing Information

TEGOPEN®
(cloxacillin sodium)
Capsules and Oral Solution

For complete information, consult Official Package Circular. (12) 9/11/75

INDICATIONS:

Although the principal indication for cloxacillin sodium is in the treatment of infections due to penicillinase-producing staphylococci, it may be used to initiate therapy in such patients in whom a staphylococcal infection is suspected. (See Important Note below.)

Bacteriologic studies to determine the causative organisms and their sensitivity to cloxacillin sodium should be performed.

IMPORTANT NOTE

When it is judged necessary that treatment be initiated before definitive culture and sensitivity results are known, the choice of cloxacillin sodium should take into consideration the fact that it has been shown to be effective only in the treatment of infections caused by pneumococci, Group A beta-hemolytic streptococci, and penicillin G-resistant and penicillin G-sensitive staphylococci. If the bacteriology report later indicates the infection is due to an organism other than a penicillin G-resistant staphylococcus sensitive to cloxacillin sodium, the physician is advised to continue therapy with a drug other than cloxacillin sodium or any other penicillinase-resistant semi-synthetic penicillin.

Recent studies have reported that the percentage of staphylococcal isolates resistant to penicillin G outside the hospital is increasing, approximating the high percentage of resistant staphylococcal isolates found in the hospital. For this reason, it is recommended that a penicillinase-resistant penicillin be used as initial therapy for any suspected staphylococcal infection until culture and sensitivity results are known.

Cloxacillin sodium is a compound that acts through a mechanism similar to that of methicillin against penicillin G-resistant staphylococci. Strains of staphylococci resistant to methicillin have existed in nature and it is known that the number of these strains reported has been increasing. Such strains of staphylococci have been capable of producing serious disease, in some instances resulting in fatality. Because of this, there is concern that widespread use of the penicillinase-resistant penicillins may result in the appearance of an increasing number of staphylococcal strains which are resistant to these penicillins.

Methicillin-resistant strains are almost always resistant to all other penicillinase-resistant penicillins (cross-resistance with cephalosporin derivatives also occurs frequently). Resistance to any penicillinase-resistant penicillin should be interpreted as evidence of clinical resistance to all, in spite of the fact that minor variations in *in vitro* sensitivity may be encountered when more than one penicillinase-resistant penicillin is tested against the same strain of staphylococcus.

CONTRAINDICATIONS:

A history of a previous hypersensitivity reaction to any of the penicillins is a contraindication.

RESULTS OF ORAL THERAPY revealed a high percentage of treatment failures with penicillin V potassium, but *no* failures with Tegopen.

		Given Tegopen® (*cloxacillin sodium*)	Given *penicillin V-K*
Staphylococcus aureus	(78 patients)	39	39
Returned to clinic at one week		29†	38†
Treatment failure at one week		0	18 (47.4%)
Staphylococcus aureus and *Streptococcus pyogenes*	(9 patients)	4	5
Returned to clinic at one week		4	5
Treatment failure at one week		0	2 (40%)
No initial bacterial growth	(14 patients)	9	5
All 14 healed, regardless of which antibiotic was administered.			
Beta-hemolytic *Streptococcus*	(1 patient)	0	1
TOTALS:	**102 patients**	**52 patients**	**50 patients**

†Eleven patients did not return for their one-week checkup These were all called by telephone, and their families reported the lesions had healed One patient was dropped from the study, early, because of adverse reaction to medication.

STUDY: DESCRIPTION/PROTOCOL

- 102 nonselected subjects, with initial bacteriology as follows: 77% *Staphylococcus aureus*, 9% mixed *Staphylococcus aureus* and *Streptococcus pyogenes*, and 1% beta-hemolytic *Streptococcus*.‡
- All patients were given randomized therapy—Tegopen capsules or oral solution, or penicillin V-K tablets or oral solution, in recommended dosages according to body weight.
- All patients were evaluated after one week's therapy. If there was no improvement, therapy was switched to the other antibiotic. The "other antibiotic" proved to be Tegopen 100% of the time because no treatment failures had occurred with Tegopen.
- A final assessment of progress was made two weeks after initiation of Tegopen therapy.

‡The remainder, to equal 100%, consisted of 14 patients (13%) who exhibited no initial bacterial growth. These 14 were all healed, whether given Tegopen or penicillin V-K.

TEGOPEN®
(cloxacillin sodium)
–effective therapy for staph infections of the skin and skin structures

WARNING:

Serious and occasionally fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin therapy. Although anaphylaxis is more frequent following parenteral therapy it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with a history of sensitivity to multiple allergens.

There have been well documented reports of individuals with a history of penicillin hypersensitivity reactions who have experienced severe hypersensitivity reactions when treated with a cephalosporin. Before therapy with a penicillin, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, and other allergens. If an allergic reaction occurs, the drug should be discontinued and the patient treated with the usual agents, e.g., pressor amines, antihistamines, and corticosteroids.

Safety for use in pregnancy has not been established.

PRECAUTIONS:

The possibility of the occurrence of superinfections with mycotic organisms or other pathogens should be kept in mind when using this compound, as with other antibiotics. If superinfection occurs during therapy, appropriate measures should be taken.

As with any potent drug, periodic assessment of organ system function, including renal, hepatic, and hematopoietic, should be made during long-term therapy.

ADVERSE REACTIONS:

Gastrointestinal disturbances, such as nausea, epigastric discomfort, flatulence, and loose stools, have been noted by some patients Mildly elevated SGOT levels (less than 100 units) have been reported in a few patients for whom pretherapeutic determinations were not made. Skin rashes and allergic symptoms, including wheezing and sneezing, have occasionally been encountered. Eosinophilia, with or without overt allergic manifestations, has been noted in some patients during therapy.

USUAL DOSAGE:

Adults: 250 mg. q.6h.

Children: 50 mg./Kg./day in equally divided doses q.6h. Children weighing more than 20 Kg should be given the adult dose. Administer on empty stomach for maximum absorption.

N.B.: INFECTIONS CAUSED BY GROUP A BETA-HEMOLYTIC STREPTOCOCCI SHOULD BE TREATED FOR AT LEAST 10 DAYS TO HELP PREVENT THE OCCURRENCE OF ACUTE RHEUMATIC FEVER OR ACUTE GLOMERULONEPHRITIS.

SUPPLIED:

Capsules—250 mg. in bottles of 100. 500 mg. in bottles of 100.
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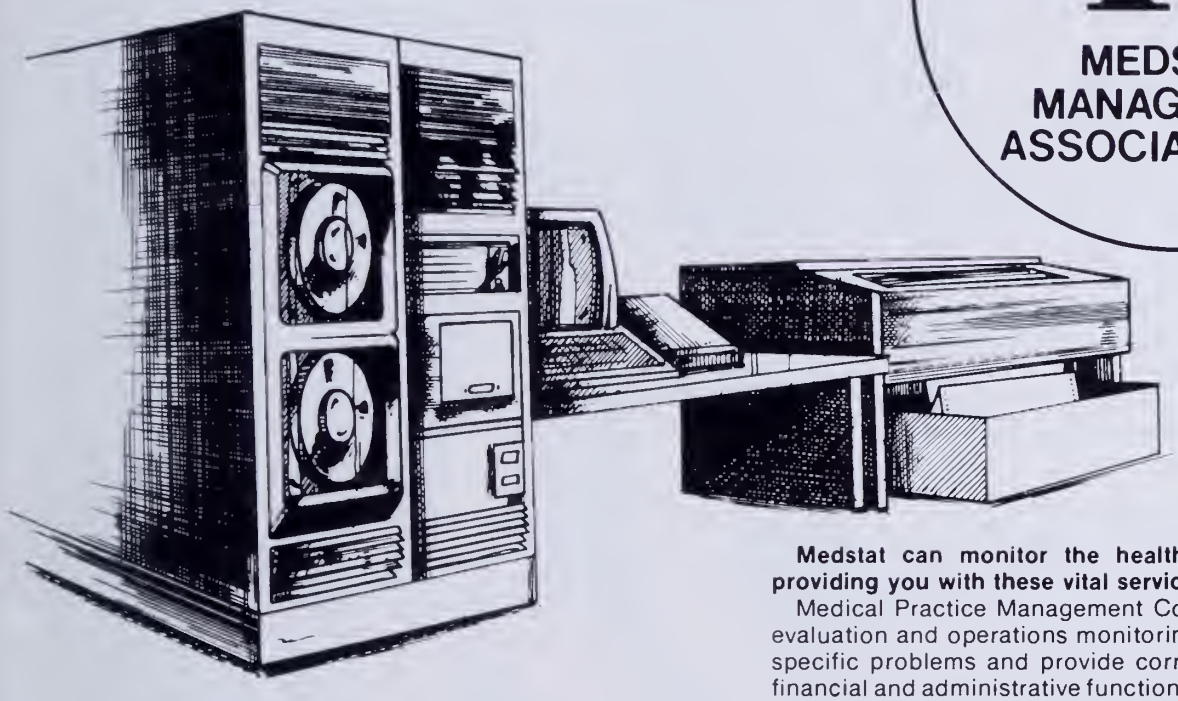

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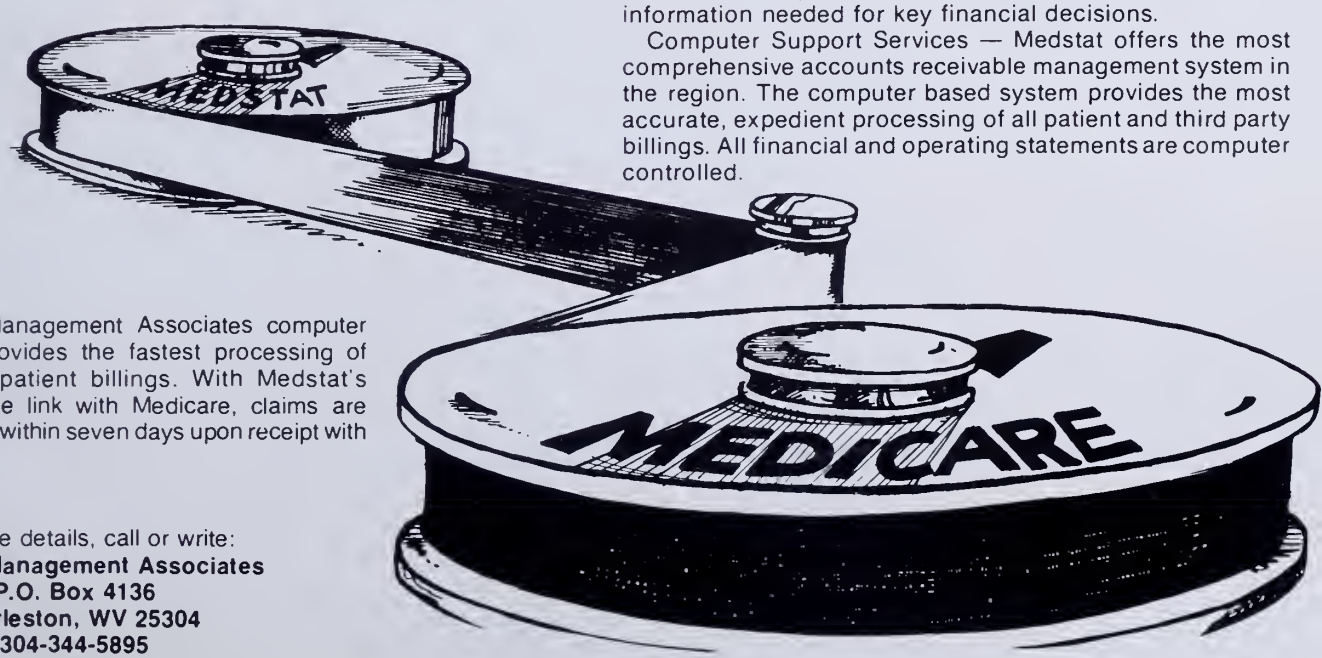

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CYCLAPEN®-W

(cyclacillin) Tablets/Suspension

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*Rapidly excreted unchanged in urine. Clinical efficacy may not always correlate with blood levels.
†Due to susceptible organisms.

1. Ginsburg CM, McCracken GH Jr, Zweighaft TC, Clahsen JC: Comparative pharmacokinetics of cyclacillin and amoxicillin in infants and children. *Antimicrob Ag Chemother* 19:1086-1088 (June) 1981.
2. Multicenter trials. Data to be published.

See important information on page after next.

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. . . in adults and children

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*Rapidly excreted unchanged in urine. Clinical efficacy may not always correlate with blood levels.
†Due to susceptible organisms.
3. Data on file. Wyeth Laboratories.
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See important information on adjoining page.

Wyeth Laboratories
Philadelphia, Pa 19101

Cyclapen®-W (cyclacillin)

Indications
Cyclacillin has less in vitro activity than other drugs in the ampicillin class and its use should be confined to these indications: Treatment of the following infections.

RESPIRATORY TRACT
Tonsillitis and pharyngitis caused by Group A beta-hemolytic streptococci
Bronchitis and pneumonia caused by *S. pneumoniae* (formerly *D. pneumoniae*)
Otitis media caused by *S. pneumoniae* (formerly *D. pneumoniae*) and *H. influenzae*
Acute exacerbation of chronic bronchitis caused by *H. influenzae**
*Though clinical improvement has been shown, bacteriologic cures cannot be expected in all patients with chronic respiratory disease due to *H. influenzae*.

SKIN AND SKIN STRUCTURES (integumentary) infections caused by Group A beta-hemolytic streptococci and staphylococci, non-penicillinase producers.

URINARY TRACT INFECTIONS caused by *E. coli* and *P. mirabilis*. (This drug should not be used in any *E. coli* and *P. mirabilis* infections other than urinary tract.)

NOTE: Perform cultures and susceptibility tests initially and during treatment to monitor effectiveness of therapy and susceptibility of bacteria. Therapy may be instituted prior to results of sensitivity testing

Contraindications Contraindicated in individuals with history of an allergic reaction to penicillins.

Warnings Cyclacillin should only be prescribed for the indications listed herein.

Cyclacillin has less *in vitro* activity than other drugs of the ampicillin class. However, clinical trials demonstrated it is efficacious for recommended indications.

Serious and occasional fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin. Although anaphylaxis is more frequent following parenteral use, it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with history of sensitivity to multiple allergens. There are reports of patients with history of penicillin hypersensitivity reactions who experienced severe hypersensitivity reactions when treated with a cephalosporin. Before penicillin therapy, carefully inquire about previous hypersensitivity reactions to penicillins, cephalosporins and other allergens. If allergic reaction occurs, discontinue drug and initiate appropriate therapy. Serious anaphylactoid reactions require immediate emergency treatment with epinephrine. Oxygen, I.V. steroids, airway management, including intubation, should also be administered as indicated.

Precautions Prolonged use of antibiotics may promote overgrowth of nonsusceptible organisms. If superinfection occurs, take appropriate measures.

PREGNANCY: Pregnancy Category B. Reproduction studies performed in mice and rats at doses up to 10 times the human dose revealed no evidence of impaired fertility or harm to the fetus due to cyclacillin. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, use this drug during pregnancy only if clearly needed.

NURSING MOTHERS: It is not known whether this drug is excreted in human milk. Because many drugs are, exercise caution when cyclacillin is given to a nursing woman.

Adverse Reactions Oral cyclacillin is generally well tolerated. As with other penicillins, untoward sensitivity reactions are likely, particularly in those who previously demonstrated penicillin hypersensitivity or with history of allergy, asthma, hay fever, or urticaria. Adverse reactions reported with cyclacillin: diarrhea (in approximately 1 out of 20 patients treated), nausea and vomiting (in approximately 1 in 50), and skin rash (in approximately 1 in 60). Isolated instances of headache, dizziness, abdominal pain, vaginitis, and urticaria have been reported. (See WARNINGS) Other less frequent adverse reactions which may occur and are reported with other penicillins are anemia, thrombocytopenia, thrombocytopenic purpura, leukopenia, neutropenia and eosinophilia. These reactions are usually reversible on discontinuation of therapy.

As with other semisynthetic penicillins, SGOT elevations have been reported.

As with antibiotic therapy generally, continue treatment at least 48 to 72 hours after patient becomes asymptomatic or until bacterial eradication is evidenced. In Group A beta-hemolytic streptococcal infections, at least 10 days' treatment is recommended to guard against risk of rheumatic fever or glomerulonephritis. In chronic urinary tract infection, frequent bacteriologic and clinical appraisal is necessary during therapy and possibly for several months after. Persistent infection may require treatment for several weeks.

Cyclacillin is not indicated in children under 2 months of age.

Patients with Renal Failure Cyclacillin may be safely administered to patients with reduced renal function. Due to prolonged serum half-life, patients with various degrees of renal impairment may require change in dosage level (see DOSAGE AND ADMINISTRATION in package insert).

Dosage (Give in equally spaced doses)

INFECTION	ADULTS	CHILDREN*
Respiratory Tract		
Tonsillitis & Pharyngitis	250 mg q.i.d.	body weight < 20 kg (44 lbs) 125 mg q.i.d. body weight > 20 kg (44 lbs) 250 mg q.i.d.
Bronchitis and Pneumonia		
Mild or Moderate Infections	250 mg q.i.d.	50 mg/kg/day q.i.d.
Chronic Infections	500 mg q.i.d.	100 mg/kg/day q.i.d.
Otitis Media	250 mg to 500 mg q.i.d.†	50 to 100 mg/kg/day†
Skin & Skin Structures	250 mg to 500 mg q.i.d.†	50 to 100 mg/kg/day†
Urinary Tract	500 mg q.i.d.	100 mg/kg/day

*Dosage should not result in a dose higher than that for adults.
†depending on severity

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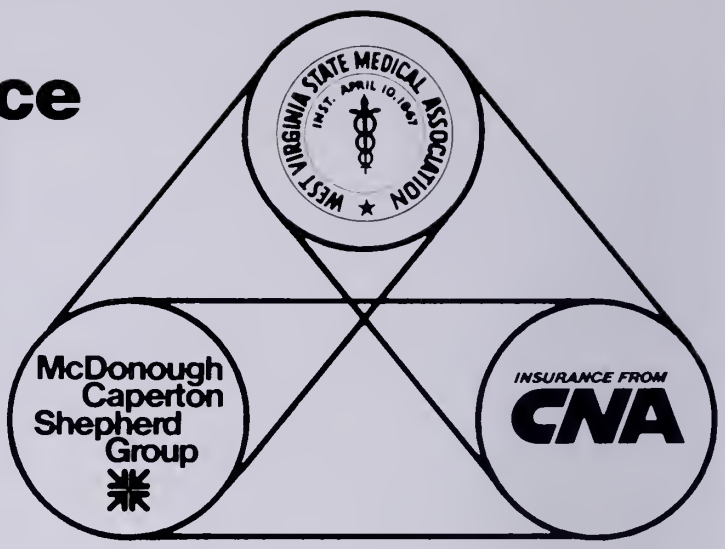

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Pentylenetetrazol..... 25.0 m
Pheniramine maleate..... 12.5 m
Nicotinic acid..... 50.0 m

Clinically proven actions

- Antihistaminic
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- Vasodilator

Few side effects

- Vasodilation occasionally causes facial flushing which can be minimized by recommending that Ru-Vert® be taken following meals o with food.

Dosage

- One or two tablets three times a da

Please see next page for a summary of prescribing information

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See following prescribing information.

DESCRIPTION: Each tablet contains the following active ingredients:

Pentylenetetrazol	25.0 mg
Pheniramine maleate	12.5 mg
Nicotinic acid	50.0 mg

INDICATIONS: Ru-Vert is indicated as an adjunct therapy in the symptomatic treatment of acute or chronic vertigo.

CONTRAINDICATIONS: Convulsive disorders or known history of sensitivity to any of the listed active ingredients. Because of the vasodilating action of nicotinic acid, Ru-Vert should not be used in patients with hypotension.

WARNINGS: The safety of this preparation during pregnancy and lactation has not been established. Use of this drug requires that the physician evaluate the potential benefits of the drug against any possible hazard to the mother and child.

PRECAUTIONS: Although there are no absolute contraindications to pentylenetetrazol, it should be used with caution in epileptic patients or those known to have a low convulsive threshold or a focal brain lesion. Caution should be exercised when treating patients with high doses of Ru-Vert who have heart disease. While pentylenetetrazol does not act directly on the myocardium, the results from central vagal stimulation could cause bradycardia.

Pheniramine maleate, like other antihistamines, may produce sedative side effects in certain patients.

Transient vasodilatation due to rapid absorption of nicotinic acid may produce facial flushing and a sensation of warmth. These effects may be ameliorated by recommending that Ru-Vert be taken following meals or with food.

ADVERSE REACTIONS: Pentylenetetrazol in high doses may produce toxic symptoms typical of central nervous system stimulants, which act on the higher motor centers and the spinal cord. Convulsions resulting from this drug are spontaneous and are not induced by external stimuli. They usually last for several minutes and are followed by profound depression and respiratory paralysis. Death has been reported from the ingestion of 10 grams of pentylenetetrazol.

DRUG ABUSE: Drug dependence has not been reported with Ru-Vert.

OVERDOSAGE: Signs and symptoms of acute overdose may be due primarily from overstimulation of the central nervous system and from excessive vasodilatation with resulting autonomic nervous system imbalance. The symptoms may include the following: vomiting, agitation, tremors, hyperreflexia, sweating, confusion, hallucinations, headache, hyperpyrexia, tachycardia. Treatment consists of appropriate supportive measures. If signs and symptoms are not too severe and the patient is conscious, gastric evacuation may be accomplished by induction of emesis or gastric lavage.

Intensive care must be provided to maintain adequate circulation and respiratory exchange.

DOSAGE AND ADMINISTRATION: The recommended dosage of Ru-Vert for vertigo or motion sickness is 1 or 2 tablets three times a day with meals or light snacks.

This drug is not for use in children under 12 years of age.

HOW SUPPLIED:

Bottles of 100 tablets	NDC 0524-0060-01
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Aorto-Iliac Aneurysm In Iliac Compression Syndrome

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Venous thrombosis can originate in the iliac vein, although this is unusual. When it occurs, it is usually due to compression of the left common iliac vein by the right common iliac artery, an entity which Cockett[4] calls the "iliac compression syndrome." A case of iliac vein compression by an abdominal aortoiliac aneurysm is reported. To the best of our knowledge, this has not been previously described.

Venous thrombosis is a disease confined, almost exclusively, to the lower extremities. The pathophysiology of this disease process was well described over 100 years ago when Virchow[1] suggested that venous thrombosis resulted from stasis of blood, venous injury and hypercoagulability. Initially, Virchow proposed that venous thrombosis began in the iliofemoral system. Homans subsequently suggested that the thrombosis originated in the veins of the calf, and noninvasive ^{125}I fibrinogen scanning has demonstrated this to be so in the vast majority of cases.[2,3]

Venous thrombosis can originate in the iliac vein, although this is unusual. When it occurs, it is usually due to compression of the left common iliac vein by the right common iliac artery, an entity which Cockett[4] calls the "iliac compression syndrome." A case of iliac vein compression by an abdominal aortoiliac aneurysm is reported. To the best of our knowledge, this has not been previously described.

Case Report

A 69-year-old male presented with a one-week history of painless swelling of the lower extremities, more severe on the left side. He gave no previous history of thrombophlebitis. On physical examination, a mass was palpable in the right lower quadrant, and bilateral lower extremity edema was noted. Impedance plethysmography was positive for deep venous thrombosis

Figure 1. Right extremity venogram demonstrates good filling of the right common iliac vein through to the inferior vena cava.

bilaterally. Right lower extremity venography demonstrated a normal deep venous system including a patent common iliac vein (Figure 1). The left lower extremity venogram demonstrated a thrombus in the superficial femoral vein, occlusion of the left common iliac vein and formation of extensive venous collaterals (Figure 2).

Intravenous pyelography and barium enema were consistent with a right pelvic mass. Computed tomography defined a 10-cm. right pelvic mass, and ultrasound of the pelvis demonstrated the mass to be sonalucent, suggestive of an arterial aneurysm. A technetium-99m Pertechnitate nuclear angiogram showed a vascular mass to the right of the aortic bifurcation. Angiography confirmed a six-by-seven-cm. aneurysm at the origin of the right iliac artery (Figure 3) which would overlie the left iliac vein.

At surgery a large false aneurysm at the bifurcation of the aorta was found. The aneurysm was resected and a vena caval clip applied. An extra-anatomic bypass was performed for revascularization. Postoperatively, he did well. Edema of the left lower extremity was markedly reduced and easily controlled.

Figure 2. Left extremity venogram demonstrates complete occlusion of the left common iliac vein, superficial abdominal collaterals, and thrombus in the femoral vein.

Discussion

The iliac vein compression syndrome, as described by Cockett,[4] is due to compression of the left iliac vein against the sacrum by the right common iliac artery or by the aortic bifurcation. In a series of 57 patients,[5] he noted left iliac occlusion in nine. In the majority of patients, thrombosis was related to pregnancy (16 patients), a febrile illness (12 patients) or recent surgery (17 patients). This suggests that iliac vein compression by the normal iliac artery alone is rarely sufficient to produce thrombosis. The addition of another etiologic parameter (injury, stasis or hypercoagulability) may be required to initiate the clotting mechanism.

The relative stasis, and perhaps venous injury, already present in the chronically compressed iliac vein predisposes to thrombosis at this location. Anatomically, an intrinsic venous defect often is found. Chronic compression may cause a localized fibrous stricture in the vein, making recanalization difficult or impossible. Accordingly, the post-thrombotic syndrome in these patients often is severe.

In our patient, venous compression was due to an expanding arterial aneurysm rather than a normal iliac artery. Compared to patients with true iliac compression syndrome, the partial obstruction was relatively acute. Following excision of the aneurysm the edema decreased markedly, and the symptoms of postphlebitic syndrome have been minimal.

Figure 3. Abdominal aorta angiogram shows a smooth, six-by-seven-cm aneurysm at the bifurcation of the aorta and right iliac artery.

The association of an abdominal aneurysm and deep venous thrombosis is unusual. Reichle[6] reported a patient with a mycotic distal aortic aneurysm who developed left calf and thigh swelling associated with tenderness over the saphenous and popliteal veins. Venography was not performed, and ligation of the inferior vena cava eventually was done. His patient's unilateral involvement, thigh edema and associated distal aortic aneurysm suggest that iliac vein compression may have been present in his case as well.

Iliac vein thrombosis is unusual. When present, a diligent search should be undertaken for a predisposing anatomic abnormality.

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Manuscript Information

Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be typewritten, triple-spaced, on one side only of firm (no onion skin or flimsy), standard letter sized (8 ½ by 11 in.) white paper. Wide margins (at least 1 ¼ in. on left) should be left free of typing. On the first or title page should be shown the title of the article, the name (or names) of the author, and his degrees. Pages should be numbered consecutively, the page number being shown in the right upper corner along with the surname of the author.

Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

A short abstract summarizing the manuscript should be included. This should be typed in double space on a separate page.

Authors are requested to submit a carbon copy with the original.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for reproduction should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. Cost of printing black and white photos in excess of 4 will be billed to author, and no more than 25 references will be published free of charge to the author. A legend should be provided for each illustration and, preferably, attached to it.

All scientific material appearing in *The Journal* is reviewed by the Editorial Board. Manuscripts should be mailed to The Editor, West Virginia Medical Journal, Box 1031, Charleston, W. Va. 25324.

Special Article

Physicians' Knowledge Of Common Outpatient Medical Costs In The Kanawha Valley-Charleston, West Virginia*

T. RAY PERRINE, M.S., M.D.
Assistant Director, Kanawha Valley Family Practice Center residency program, South Charleston, West Virginia; and Assistant Professor of Family Practice, Charleston Division, West Virginia University Medical Center

The purpose of this research was to discover residents' and physicians' knowledge and awareness of the costs of prescription drugs, laboratory tests, and x-ray studies in the Kanawha Valley of Charleston, West Virginia. The results were compiled by surveying residents in the various residency programs at Charleston Area Medical Center; Charleston Division, West Virginia University Medical Center; private practitioners; hospital/private laboratories; radiologists; and area pharmacies in the Kanawha Valley. A cost analysis was made for each type of service; i.e., determining the average cost of the prescription drugs from the number of pharmacies that responded to the survey. A listing of the maximum costs also are noted.

As a result of this research it is noted the medical community is not very knowledgeable of the costs of outpatient services in the areas suveyed. It is hoped that this survey will improve this knowledge. Several general principles about medical costs in these areas were discovered that can be used as guidelines for counseling patients.

THE purpose of this study is two-fold: first, to get some indication of the cost of outpatient services commonly used by physicians in the areas of laboratory tests, x-ray studies, and prescription drugs in the Kanawha Valley; and second, to determine local physicians' and residents' knowledge of the costs of these services.

Fellow Family Practice residents and faculty were asked what medical services they wanted included in the survey. A master list of services was compiled and a questionnaire was developed for each of the following areas of service: x-rays, laboratory tests, and prescription drugs. The questionnaire on prescription drugs was sent to most of the pharmacies in the Kanawha Valley. The survey of x-ray costs was made by personal visits to four x-ray departments in the Kanawha Valley (two in local hospitals and two in the community). The laboratory cost survey was made by visiting or phoning four local laboratories, including laboratories at the Kanawha Valley Family Practice Center (some tests then were sent to a national laboratory chain), two local hospital outpatient laboratories and one private outpatient laboratory.

After the above data were collected, a cost analysis was made for each type of service. This analysis included determining the average cost of the prescription drugs from the number of pharmacies that responded to the survey. A listing of the maximum and minimum costs of prescription drugs also was noted. The same type of compilation was done for x-rays and laboratory tests. In addition to costs, pharmacies were asked to provide a listing of their 10 most commonly requested prescription drugs.

Another questionnaire was made for residents and local practicing physicians in order to evaluate their knowledge of the costs of commonly requested medical services and prescription drugs.

Results

Of 21 pharmacies to which questionnaires concerning 38 prescription drug costs were sent, 11 responded, including the largest drug chain in the Kanawha Valley. The price on a given drug was listed and the total number of prices was added. This figure was then divided by the number of pharmacies responding to get the average cost of the drug for the number of pharmacies responding to the survey. A notation was made of the highest price quoted for each drug and the lowest price quoted for each drug. The results of these procedures are listed in Table 1.

*This paper was written while the author was a third-year resident in the residency program at the Kanawha Valley Family Practice Center, South Charleston, West Virginia.

TABLE 1 (continued on next page)

Average Cost of Some Common Prescription Drugs in the Kanawha Valley as of October, 1979

	Drug	*Quantity*	*Average Cost**	*Maximum*	*Minimum*
1.	Actifed	#30	$ 2.77	$ 4.70	$ 1.83
	Actifed	#100	$ 7.21	$ 9.20	$ 5.49
2.	Aldomet 250mg	#100	$11.85	$14.85	$ 8.99
	Aldomet 500mg	#100	$21.01	$29.00	$17.30
3.	Amoxicillin 125mg/5ml	150ml	$ 6.17	$10.90	$ 3.35
	Amoxicillin 125mg	#30	$10.45	$11.90	$ 8.99
	Amoxicillin 250mg/5ml	150ml	$ 9.23	$14.83	$ 5.10
	Amoxicillin 250mg	#30	$ 9.60	$15.63	$ 5.29
4.	Amoxil 125mg/5ml	150ml	$ 6.15	$11.90	$ 3.35
	Amoxil 125mg	#30	$10.95	$12.90	$ 8.99
	Amoxil 250mg/5ml	150ml	$ 9.04	$13.50	$ 5.10
	Amoxil 250mg	#30	$ 9.72	$15.63	$ 5.50
5.	Ampicillin 250mg/5ml	200ml	$ 5.45	$ 7.25	$ 3.33
	Ampicillin 250mg	#40	$ 5.73	$10.00	$ 3.00
	Ampicillin 500mg	#40	$ 9.32	$16.00	$ 5.72
6.	Antivert 12.5mg	#100	$ 9.11	$11.75	$ 6.38
7.	Bactrim	#40	$12.10	$14.00	$ 9.95
8.	Benadryl 25mg	#30	$ 2.84	$ 4.80	$ 1.89
	Benadryl 50mg	#30	$ 3.70	$ 5.80	$ 2.89
9.	Dalmane 15mg	#30	$ 4.92	$ 6.35	$ 4.19
	Dalmane 30mg	#30	$ 5.64	$ 7.00	$ 4.80
10.	Darvocet-N-100	#100	$15.16	$20.00	$12.97
11.	Darvon Compound 65	#100	$11.66	$15.00	$ 8.91
12.	Dimetapp	#20	$ 3.46	$ 5.45	$ 2.83
	Dimetapp	#100	$13.80	$16.00	$10.89
13.	Donnatal	#30	$ 2.35	$ 4.19	$ 1.35
14.	Dyazide	#100	$12.74	$16.60	$ 9.91
15.	Elavil 50mg	#15	$ 4.31	$ 6.50	$ 3.38
	Elavil 50mg	#30	$ 8.32	$14.20	$ 6.22
	Elavil 50mg	#100	$21.82	$25.80	$17.50
	Elavil 100mg	#15	$ 7.44	$ 9.80	$ 6.00
	Elavil 100mg	#30	$13.84	$18.00	$11.52
	Elavil 100mg	#100	$40.29	$54.00	$34.76
16.	Empirin with Codeine	#30	$ 4.69	$ 6.50	$ 3.86
17.	Erythrocin 125mg	#40	$ 6.69	$ 8.50	$ 3.60
	Erythrocin 250mg	#40	$ 8.85	$10.65	$ 6.13
18.	Erythromycin 125mg	#40	$ 5.20	$ 7.50	$ 3.60
	Erythromycin 250mg	#40	$ 6.48	$ 8.80	$ 4.50
19.	Hydrochlorothiazide 25mg	#100	$ 3.57	$ 6.00	$ 1.99
	Hydrochlorothiazide 50mg	#100	$ 4.73	$ 9.00	$ 2.17
20.	HydroDiuril 50mg	#100	$ 8.27	$11.25	$ 5.97
	HydroDiuril 100mg	#100	$14.25	$17.15	$11.63
21.	Inderal 10mg	#100	$ 6.89	$10.40	$ 5.19
	Inderal 40mg	#100	$11.12	$13.40	$ 8.83
	Inderal 80mg	#100	$16.88	$20.50	$14.58
22.	Indocin 25mg	#100	$16.25	$20.60	$13.13
23.	Keflex 250mg	#40	$18.06	$22.40	$15.06
	Keflex 500mg	#40	$34.67	$44.00	$28.63
24.	Lanoxin 0.125mg	#100	$ 2.11	$ 3.90	$ 1.23
	Lanoxin 0.25mg	#100	$ 2.24	$ 4.15	$ 1.05
25.	Lasix 20mg	#100	$10.88	$13.00	$ 9.15
	Lasix 40mg	#100	$13.19	$17.00	$10.37
	Lasix 80mg	#100	$21.64	$28.00	$16.58
26.	Motrin 400mg	#100	$17.96	$23.80	$14.31
27.	Omnipen 250mg	#40	$ 7.13	$12.00	$ 3.00
	Omnipen 500mg	#40	$11.10	$16.00	$ 6.75

*Representing 11 pharmacies, including the largest drug chain in the Kanawha Valley, with the average figure coming from a compilation of the quoted prices for these 11 pharmacies.

TABLE 1 CONTINUED

	Drug	Quantity	Average Cost*	Maximum	Minimum
28.	Ortho Novum 1/50	#21	$ 4.95	$ 6.55	$ 4.24
	Ortho Novum 1/50	#28	$ 4.96	$ 6.55	$ 4.24
	Ortho Novum 1/80	#21	$ 4.95	$ 6.55	$ 4.24
	Ortho Novum 1/80	#28	$ 4.96	$ 6.55	$ 4.24
29.	Phenoxymethyl (Pen V-K) 250mg Penicillin Potassium	#40	$ 4.36	$ 8.50	$ 2.75
	(Pen V-K) 500mg	#40	$ 6.50	$ 9.50	$ 4.80
30.	Pen Vee-K 250mg	#40	$ 6.16	$ 8.75	$ 2.75
	Pen Vee-K 500mg	#40	$10.10	$15.47	$ 5.50
31.	Premarin 0.625mg	#21	$ 2.97	$ 6.98	$ 1.86
32.	Septra	#40	$12.98	$20.33	$ 9.84
33.	Sumycin 250mg	#40	$ 4.17	$ 8.00	$ 2.69
	Sumycin 500mg	#40	$ 6.36	$10.00	$ 4.40
34.	Tagamet 300mg	#100	$27.67	$36.00	$23.50
35.	Tetracycline 250mg	#100	$ 5.40	$12.50	$ 2.98
	Tetracycline 500mg	#100	$ 8.78	$14.00	$ 4.96
36.	Tylenol #3	#30	$ 5.13	$ 6.90	$ 4.19
37.	Valium 5mg	#100	$12.71	$16.00	$10.88
	Valium 10mg	#100	$22.65	$29.50	$17.72
38.	V-Cillin-K 250mg	#40	$ 6.22	$ 8.00	$ 4.51
	V-Cillin-K 500mg	#40	$10.43	$12.87	$ 8.68

*Representing 11 pharmacies, including the largest drug chain in the Kanawha Valley, with the average figure coming from a compilation of the quoted prices for these 11 pharmacies.

The data show a considerable variance on the price of a given drug in the Kanawha Valley.

Several pharmacies responding to the survey also commented on factors affecting the cost of the drugs. One stated that the cost of the drug also may reflect certain services the store provides; for example, delivery service of prescriptions. Some stores provide a discount to senior citizens. One pharmacy stated that its generic drugs are from a brand-name company that they select and buy from in quantity.

Additional information was requested in the drug price questionnaire. There were nine pharmacies which supplied this information. The results of that and a comparison with the most commonly prescribed drugs on a national basis are listed in Tables 2, 3, and 4. The results from the major pharmacy chain in the Kanawha Valley have been listed separately because the number of stores in the major chain is so much greater than the individual pharmacies. In comparing the usage of drugs in the Kanawha Valley with the national usage there were differences in all but three drugs, i.e., the number-one drug in all cases was Valium; the number-three drug nationally and in eight individual pharmacies was Inderal; and, the number-four drug was the same in all cases, Lasix. It also is of interest to note that the largest drug chain in the valley reports a tie for the number-10 spot between Tagamet and Ampicillin.

A similar procedure for obtaining an average cost of laboratory test fees was followed, and the results of that average, along with a maximum and minimum cost for each test, is presented in Table 5.

Total cost to patients for x-rays and radiologists' interpretations was compiled in a like fashion, and the results of that survey are presented in Table 6.

Physician Survey

The last phase, and primary purpose, of the survey was a physician cost questionnaire. This questionnaire includes prescription drug costs, laboratory tests and x-rays.

Approximately 120 questionnaires were distributed to residents and local practicing physicians in the Kanawha Valley, and among a total of 57 physicians who responded were 27 residents and 30 attendings. The questionnaires from residents and local practicing physicians first were checked separately to see how many came within 10 and 20 per cent of the average cost of the prescription drugs, and then tabulated with both groups together (total group). A determination of the mode was tabulated. The presentation of this data is found in Tables 7 and 8.

Physicians' knowledge of the cost of prescription drugs was best for Keflex 250mg #40, with 46 per cent of those surveyed within 20 per cent of the average cost. The lowest percentage of those surveyed was two per cent for the drug Inderal 10mg #100 in the 10-per cent range and five per cent for Lanoxin 0.25mg #100 in the 20-per cent range. In the great majority of cases, physicians thought drug costs were more expensive than they actually are.

The next area of study was laboratory tests. A total of 58 physicians responded to requests for this data (27 residents and 31 attendings). A compilation of this data for the 10- and 20-per cent range, along with the mode, is found in Tables 9 and 10. The most accurate response was to the SMAC 20 with 48 per cent of those surveyed coming within 20 per cent of the cost. In the 10-per cent range, the best response was to the urine pregnancy test with 40 per cent of those surveyed coming within the 10-per cent range. The poorest showing in the 20-per cent range was on the Pap test with 12 per cent being in this range. In the 10-per cent range the poorest percentage was on the B.U.N. with two per cent being within the 10-per cent range. In the laboratory tests category, the physicians in seven cases thought the tests were less expensive than they are, and in three cases they thought the tests were more expensive than they are.

X-Ray Costs

The last area surveyed was x-ray costs. A total of 58 physicians responded (27 residents and 31 attendings). The results of x-ray cost estimates are given in Tables 11 and 12. In this category, the best response was 54 per cent for the 20-per cent range on the cost of a P.A. and lateral chest x-ray; the lowest was 22 per cent for upper G.I., gallbladder, lumbar spine, and sinus series. In the 10-per cent range, the highest percentage was 24 per cent for both a barium enema and an intravenous pyelogram. In the majority of cases (eight of 10), physicians thought x-rays cost less than they do.

As evidenced, the medical community is not very knowledgeable of the costs of outpatient services in the areas surveyed. It is hoped that surveys such as this can improve that knowledge even though, with inflation, much of the data already is out of date. Other points are of interest: one, the fact that the major drug chain in the Kanawha Valley lists its number-10 drug as Tagamet may lend credence to the belief by some that Tagamet is being over prescribed; and two, being out in practice does not seem to improve one's knowledge of these costs since residents did better than attendings in several areas.

TABLE 2

Ten Most Commonly Requested Prescriptions as Reported by the Largest Drug Chain in the Kanawha Valley

1. Valium 5mg
2. Aldomet 250mg
3. Lanoxin 0.25mg
4. Lasix 40mg
5. HydroDiuril 50mg
6. Inderal 10mg
7. Darvon Compound 65
8. Dyazide
9. Ortho Novum 1/50 (21 pck)
10. Tagamet tied with Ampicillin 250mg

TABLE 3

Ten Most Commonly Requested Prescriptions as Reported by Eight Independent Drug Stores in the Kanawha Valley

1. Valium 5mg
2. Dyazide
3. Inderal 10mg & 40 mg
4. Lasix 40mg
5. Tetracycline 250mg
6. Aldomet 250mg
7. Darvocet-N-100
8. Darvon Compound 65
9. Ampicillin 250mg tied with HydroDiuril 50mg
10. Dimetapp

TABLE 4

Ten Most Commonly Requested Prescription Drugs, Nationally, as Reported by Pharmacy Times, April, 1979

1. Valium (Roche)*
2. Ampicillin (unspecified)
3. Inderal (Ayerst)
4. Lasix Oral (Hoechst-Roussel)
5. Tylenol/Codeine (McNeil)
6. Dyazide (SK & F)
7. Tetracycline syst. (unspecified)*
8. Dimetapp (Robins)*
9. Actifed (B-W)
10. Aldomet (MSD)

*In first 50 since 1966. National Prescription Audit, IMS America Ltd., Ambler, Pa.

For those interested in advising patients about medical costs, the following general principles can be recommended from this survey:

1. Services rendered by the pharmacy you choose to use may influence the price of prescription drugs.

2. There is a wide range in drug costs. It is worthwhile for the patient to get quotes from several pharmacies on a prescription.

3. In general, it was found that the laboratory tests done in our office setting (including ones sent to an out-of-state laboratory) were cheaper than costs at outpatient laboratories in the Kanawha Valley.

4. Costs of radiological procedures are lower at a private radiologist's office than at an outpatient department in a hospital.

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References

1. 1978: Top 200 Drugs (data based on a national audit of pharmacists). *Pharmacy Times* 1979; 45(4): 29-37.

2. "A Study On Medical Costs To Patients," Family Practice Center, Terre Haute, Indiana. 1976.

TABLE 5

Average Cost of Some Common Laboratory Tests in the Kanawha Valley as of February, 1980

Lab Test	*Average Cost*	*Maximum* (*of labs surveyed*)	*Minimum*
1. C. B. C. with differential	$ 7.75	$ 9.00	$ 6.00
2. Hgb & Hct	$ 5.90	$ 7.00	$ 5.50
3. Complete Urine Analysis	$ 5.00	$ 7.00	$ 3.00
4. Urine Dip Stick	$ 2.93	$ 5.00	$ 1.00
5. Protime	$ 7.08	$ 7.50	$ 6.75
6. APTT	$ 8.25	$ 9.50	$ 6.75
7. SMAC 20 or equivalent	$26.38	$28.00	$24.00
8. Serum glucose	$ 7.06	$10.00	$ 4.00
9. SMA 6/60 or equivalent	$21.00°	$45.50°	$11.00
10. Urine culture & sensitivity	$21.87	$27.60	$18.00
11. Cholesterol	$ 7.48	$10.00	$ 5.00
12. Throat culture	$10.80	$20.00	$ 2.00°°
13. Pap smear	$ 4.42	$ 5.25	$ 3.00
14. B. U. N.	$ 7.38	$10.00	$ 4.00
15. Prenatal Panel II	$23.04	$30.65	$17.50
16. Triglycerides	$11.79	$19.65	$ 7.50
17. Urine Pregnancy Test slide method	$10.70	$15.60	$ 5.00

°One laboratory has no such test and charges for each individual test if a 6/60 is ordered.

°°Processing of a Cul Pack that is sent to the State Lab.

TABLE 6

Average Cost of Some Common X-Rays in the Kanawha Valley as of January, 1980

X-Ray	*Average Cost*	*Maximum*	*Minimum*
		(of labs surveyed)	
1. P. A. and lateral chest	$ 30.49	$36.45	$22.00
2. Ankle	$ 29.42	$35.60	$20.57
3. Wrist	$ 27.52	$34.00	$21.78
4. Elbow	$ 27.52	$34.00	$21.78
5. Hand	$ 29.42	$35.60	$20.57
6. Knee	$ 33.89	$50.00	$20.57
7. Femur	$ 31.14	$39.00	$20.57
8. K. U. B.	$ 26.80	$38.20	$20.00
9. Upper G. I.	$ 77.08	$89.80	$60.00
10. Barium Enema	$ 68.74	$81.95	$52.00
11. I. V. P.	$ 77.75	$91.50	$60.00
12. Skull series	$ 54.08	$64.80	$40.00
13. Sinus series	$ 57.40	$91.60	$38.00
14. Gall Bladder	$ 44.96	$56.85	$35.00
15. Lumbar spine with obliques	$ 58.50	$67.50	$48.00
16. Flat and Upright of abdomen	$ 42.18	$52.20	$40.00
17. Ultrasound:			
for Biparietal Diameter			
for Fetal Age	$ 87.50		
for Abdomen	$106.50		
18. C. A. T. scan	$236.00		

TABLE 7

Results of the Respondents Who Came Within 10% of the Average Cost of the Drug

Drug	*Average Price*	*Rounded Dollar*	*Resident No. 27—%*		*Attending No. 30—%*		*Total No. 57—%*		*Mode*
1. Aldomet #100, 250mg	$11.85	$12.00	5	19%	5	17%	10	18%	$20.00
2. Ampicillin #40, 250mg	5.73	6.00	3	11%	4	13%	7	12%	8.00
3. Darvon Compound-65, #100	11.66	12.00	3	11%	4	13%	7	12%	15.00
4. Dimetapp #20	3.46	3.00	5	19%	4	13%	9	16%	4.00
5. Dyazide #100	12.74	13.00	4	15%	6	20%	10	18%	10.00
6. Elavil #30, 50mg	8.32	8.00	6	22%	5	17%	11	17%	15.00
7. HydroDiuril #100, 50mg	8.27	8.00	5	19%	5	17%	10	18%	8.00
8. Inderal #100, 10mg	6.89	7.00	1	4%	0	0%	1	2%	10.00
9. Keflex #40, 250mg	18.06	18.00	5	19%	5	17%	10	18%	20.00
10. Lanoxin #100, 0.25mg	2.24	2.00	1	4%	1	3%	2	4%	5.00
11. Lasix #100, 40mg	13.19	13.00	2	7%	4	13%	6	11%	10.00
12. Ortho Novum 1/50, 1 pk. (21)	4.95	5.00	7	26%	6	20%	13	23%	8.00
13. Penicillin VK #40, 250mg	4.36	4.00	3	11%	4	13%	7	12%	5.00
14. Tagamet #100, 300mg	27.67	28.00	7	26%	6	20%	13	23%	30.00
15. Valium #100, 5mg	12.71	13.00	4	15%	3	10%	7	12%	10.00

TABLE 8

Results of the Respondents Who Came Within 20% of the Average Cost of the Drug

Drug	*Average Price*	*Rounded Dollar*	*Resident No. 27—%*		*Attending No. 30—%*		*Total No. 57—%*		*Mode*
1. Aldomet #100, 250mg	$11.85	$12.00	10	37%	9	30%	19	33%	$20.00
2. Ampicillin #40, 250mg	5.73	6.00	8	30%	8	27%	16	28%	8.00
3. Darvon Compound-65, #100	11.66	12.00	8	30%	7	23%	15	26%	15.00
4. Dimetapp #20	3.46	3.00	6	22%	9	30%	15	26%	4.00
5. Dyazide #100	12.74	13.00	8	30%	10	33%	13	32%	10.00
6. Elavil #30, 50mg	8.32	8.00	7	26%	7	23%	14	25%	15.00
7. HydroDiuril #100, 50mg	8.27	8.00	7	26%	7	23%	14	25%	8.00
8. Inderal #100, 50mg	6.89	7.00	3	11%	3	10%	6	11%	10.00
9. Keflex #40, 250mg	18.06	18.00	11	41%	15	50%	26	46%	20.00
10. Lanoxin #100, 0.25mg	2.24	2.00	2	7%	1	3%	3	5%	5.00
11. Lasix #100, 40mg	13.19	13.00	3	11%	9	30%	12	21%	10.00
12. Ortho Novum 1/50, 1 pkg. (21)	4.95	5.00	11	41%	11	37%	22	39%	8.00
13. Penicillin VK #40, 250mg	4.36	4.00	4	15%	6	20%	10	18%	5.00
14. Tagamet #100, 300mg	27.67	28.00	12	44%	12	40%	24	42%	30.00
15. Valium #100, 5mg	12.71	13.00	7	26%	7	23%	14	25%	10.00

TABLE 9

Results of the Respondents Who Came Within 10% of the Average Cost of the Lab Tests

Test	*Average Cost*	*Rounded Dollar*	*Resident No. 27—%*		*Attending No. 31—%*		*Total No. 58—%*		*Mode*	
1. CBC with differential	$ 7.75	$ 8.00	2	7%	7	23%	9	16%	$10.00	
2. Complete Urinalysis	5.00	5.00	9	33%	8	26%	17	29%	5.00	
3. Protime	7.08	7.00	3	11%	3	10%	6	10%	10.00	tied with $6.00
4. SMAC 20	26.38	26.00	7	26%	8	26%	15	26%	25.00	
5. Blood Sugar	7.06	7.00	0	0%	2	7%	2	4%	5.00	
6. SMA 6/60 or equal	12.83	13.00	10	37%	7	23%	17	29%	12.00	
7. Urine C & S	21.87	22.00	2	7%	10	32%	12	21%	15.00	tied with $20.00
8. Pap	4.42	4.00	0	0%	4	13%	4	7%	5.00	
9. B.U.N.	7.38	7.00	0	0%	1	3%	1	2%	5.00	
10. Urine/Pregnancy	10.70	11.00	10	37%	13	42%	23	40%	10.00	

TABLE 10

Results of the Respondents Who Came Within 20% of the Average Cost of the Lab Tests

Test	*Average Cost*	*Rounded Dollar*	*Resident No. 27—%*		*Attending No. 31—%*		*Total No. 58—%*		*Mode*	
1. CBC with differential	$ 7.75	$ 8.00	5	19%	12	39%	17	29%	$10.00	
2. Complete Urinalysis	5.00	5.00	11	41%	15	48%	26	45%	5.00	
3. Protime	7.08	7.00	12	44%	12	39%	24	41%	10.00	tied with $6.00
4. SMAC 20	26.38	26.00	16	59%	12	39%	28	48%	25.00	
5. Blood Sugar	7.06	7.00	6	22%	17	55%	23	40%	5.00	
6. SMA 6/60 or equal	12.83	13.00	14	52%	9	29%	23	40%	12.00	
7. Urine C & S	21.87	22.00	7	26%	14	45%	21	36%	15.00	tied with $20.00
8. Pap	4.42	4.00	0	0%	7	23%	7	12%	5.00	
9. B.U.N.	7.38	7.00	7	26%	10	32%	17	29%	5.00	
10. Urine/Pregnancy	10.70	11.00	10	37%	14	45%	24	41%	10.00	

TABLE 11

Results of the Respondents Who Came Within 10% of the Average Cost of the X-Rays

X-Ray	*Average Cost*	*Rounded Dollar*	*Resident No. 27—%*		*Attending No. 31—%*		*Total No. 58—%*		*Mode*	
1. P.A. Lateral Chest	$30.49	$30.00	7	26%	2	7%	9	16%	$25.00	
2. Ankle	29.42	29.00	3	11%	3	10%	6	10%	25.00	
3. Flat & Elevated Abdomen	42.18	42.00	4	15%	3	10%	7	12%	25.00	
4. Upper GI	77.08	77.00	6	22%	5	16%	11	19%	75.00	
5. Barium Enema	68.74	69.00	9	33%	5	16%	14	24%	75.00	
6. Intravenous Pyelogram	77.75	78.00	9	33%	5	16%	14	24%	50.00	
7. Gall Bladder	44.96	45.00	0	0%	0	0%	0	0%	50.00	tied with $60.00
8. Lumbar Sacral Spine w/obliques	58.50	59.00	1	4%	3	10%	4	7%	35.00	
9. Sinus Series	57.40	58.00	2	7%	1	3%	3	5%	30.00	
10. Skull Series	54.08	54.00	4	15%	5	16%	9	16%	30.00	tied with $40.00

TABLE 12

Results of the Respondents Who Came Within 20% of the Average Cost of the X-Rays

X-Ray	*Average Cost*	*Rounded Dollar*	*Resident No. 27—%*		*Attending No. 31—%*		*Total No. 58—%*		*Mode*	
1. P. A. Lateral Chest	$30.49	$30.00	16	59%	15	48%	31	54%	$25.00	
2. Ankle	29.42	29.00	10	37%	9	29%	19	33%	25.00	
3. Flat & Elevated Abdomen	42.18	42.00	6	22%	8	26%	14	24%	25.00	
4. Upper GI	77.08	77.00	8	30%	5	16%	13	22%	75.00	
5. Barium Enema	68.74	69.00	12	44%	9	29%	21	36%	75.00	
6. Intravenous Pyelogram	77.75	78.00	13	48%	6	19%	19	33%	50.00	
7. Gall Bladder	44.96	45.00	3	11%	10	32%	13	22%	50.00	tied with $60.00
8. Lumbar Sacral Spine w/obliques	58.50	59.00	7	26%	6	19%	13	22%	35.00	
9. Sinus Series	57.40	58.00	5	19%	8	26%	13	22%	30.00	
10. Skull Series	54.08	54.00	6	22%	10	32%	16	28%	30.00	tied with $40.00

Medical Grand Rounds

From the West Virginia University Medical Center

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Chronic Intestinal Pseudo-Obstruction

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Chronic intestinal pseudo-obstruction is a disorder of motility of the gut. The clinical presentation is varied, and involves vomiting, abdominal distention and pain, and diarrhea or constipation. Although it may simulate an acute mechanical obstruction, in other circumstances it may be a more chronic disorder with malabsorption.

Recognition of the disorder is of primary importance in order to avoid unnecessary surgery. Dietary manipulations and intermittent courses of broad-spectrum antibiotics may assist in patient management.

I was delighted when I was invited to speak on chronic intestinal pseudo-obstruction syndrome because the topic leads to a more global consideration of the tubular gut. It allows me to interest you in a number of fascinating matters. The condition may be defined as a syndrome in which there are signs and symptoms of intestinal obstruction without concrete evidence of an actual lesion obstructing the intestinal lumen.

My cardiologist colleagues have disseminated very well current knowledge of the heart as a neuromuscular pump, but those of us interested in the gastrointestinal tract have not done as well. In truth, the GI tract is an extraordinary organ quite analagous to the heart as a neuromuscular pump, but much more complex; it is endowed also with multiple functions: hormonal, metabolic, absorptive, reservoir and many others. The gut is ordinarily taken for granted, and careful study of its complexities is just beginning.

Intestinal Pump

Let's return to the neuromuscular pump concept. Gastrointestinal pumping is accomplished by coordinated movements of circular and longitudinal smooth muscle fibers. Circular muscle peristaltic waves function as "valves" throughout the entire tract, and localized areas can be identified structurally and physiologically as true valves (e.g., the lower esophageal sphincter, the pylorus, the ileocecal valve, and the internal and external anal sphincters).

Appropriate propulsive function of this long and complex tube requires a sophisticated control system (the enteric nervous system), modulated by local stretch, pH and osmotic receptors, and by a large array of GI hormones, each with its own servo system of feedback control. These include secretin, vasoactive intestinal peptide, gastrin, cholecystokinin, glucagon and many others not as well known.

There is a pacemaker function in the upper GI tract which initiates peristaltic activity below it, quite analagous to the sinus node, the A-V node and the bundle of His in the heart. Both the heart and the GI tract are further regulated by the central nervous system by way of the vagus nerves, and the autonomic nervous system in the form of sympathetic and parasympathetic ganglia and neurons. Recent studies indicate that the number of individual neurons in the enteric nervous system (the ENS) is roughly equal to the number of neurons in the spinal

cord. Gershon[7] and others have shown that the ENS is sufficiently large and complex that it should be considered as a third member of the autonomic nervous system (ANS). It also is sufficiently independent of the CNS and the other two members of the ANS (sympathetic and parasympathetic) that it can function well even when disconnected from all external nerve control.

It is no wonder that dysfunctions and structural disorders of this sophisticated machine are quite common. We clinicians and our patients accept these mundane nuisances as "heartburn, indigestion, dyspepsia, diarrhea, constipation, gas, irritable colon" and a host of other "folk-diagnoses." Only those that are definable or measureable receive a name or diagnosis.

Illustrative Cases

My own patients have presented me with a bewildering variety of clinical problems, later proving to be pseudo-obstruction:

1. Michael S. was a 27-year-old male with untreated, non-tropical sprue. He came to the ER with acute intestinal obstruction. While preparing him for exploration we noted the process began to ameliorate.

2. S.R. was an 18-year-old female with megaduodenum. She underwent duodeno-jejunostomy because of a supposed superior mesenteric artery syndrome, but died five years later of progressive malnutrition caused by mechanical inability to eat an adequate diet.

3. P.S. sustained a compression fracture of three lumbar vertebrae. He became acutely ill with a dilated colon, and there was fear of imminent perforation.

4. M.S. was a 75-year-old female with severe cardiorespiratory decompensation. She too presented with an acute dilatation of the colon interpreted as colonic obstruction.

5. B.B. was a 51-year-old female with known scleroderma (progressive systemic sclerosis) who had repeated attacks of acute intestinal obstruction.

6. B.K. was a 50-year-old female with recurrent attacks of pain and distention; studies showed extensive jejunal diverticulosis.

7. J.A. was a 26-year-old male with many episodes of gastro-duodenal dilatation and vomiting. He had a form of muscular dystrophy, and a brother died of similar GI symptoms.

8. M.S. was a 27-year-old female with one year of intermittent abdominal distention and need for urinary bladder catheterization.

None of these patients ever presented an occluding lesion as shown by subsequent barium studies, operations or autopsies. Their propulsive disorders can be characterized as intestinal pseudo-obstruction. We are all quite familiar with acute intestinal pseudo-obstruction, or ileus, and acute colonic dilatation, Ogilvie's syndrome[1] (patient three). This is familiar also in a number of situations such as fracture of the lumbar spine, cardiac or respiratory failure, etc.

The syndromes of chronic intestinal pseudo-obstruction are less well understood and present difficult diagnostic and therapeutic problems. If we include irritable colon and numerous other "functional" problems, the syndrome is common; but patients with life- and health-threatening disorders are not encountered frequently.

Schuffler[2] has published the most current review of the general problem. Faulk and his colleagues[3] have presented an excellent review of the extended subject. Several other contributory references are listed in the bibliography.

Secondary Causes

Chronic intestinal pseudo-obstruction (CIP) syndrome may be seen in association with diseases not primary to the GI tract; these are the secondary causes. They are outlined well in the Table. Progressive systemic sclerosis (PSS) surely has dominated this group statistically. Nearly half of the secondary CIP patients

TABLE

Recognized Causes of Chronic Intestinal Pseudo-Obstruction

1. Collagen Diseases
   - Progressive systemic sclerosis
   - Dermatomyositis; polymyositis
   - Systemic lupus erythematosus
   - Ehlers-Danlos syndrome
2. Endocrine Disorders
   - Myxedema
   - Diabetes mellitus
   - Pheochromocytoma
   - Hypoparathyroidism
3. Neurological Disorders
   - Myotonic dystrophy
   - Parkinson's disease
   - Familial autonomic dysfunction
   - Psychosis
4. Miscellaneous
   - Jejunoileal bypass
   - Jejunal diverticulosis
   - Amyloidosis
   - Celiac-sprue?
   - Ceroidosis?
   - Chagas' disease
   - Sclerosing mesenteritis
   - Drugs

from Schuffler *et al.*, Reference 2

eventually prove to have PSS; most of them will have recognizable PSS before GI symptoms are significant. A small number present with GI problems years before other features of the disease emerge.

It is not surprising that primary muscular disorders such as muscular dystrophy, and primary neurological conditions such as Parkinson's disease or quadriplegia also would attack the muscular and neurological functions of the GI tract. Ceroidosis is a brown pigment deposition in smooth muscle fibers afflicted with atrophy; its cause is unknown.

Myxedema more commonly affects the colon, causing severe stagnation and constipation. More than one such patient has had abdominal exploration, sometimes with fatal results, before a proper diagnosis was made. This is particularly likely to occur if there is peritoneal fluid as well, a known complication of myxedema.

Diabetes seems to cause a variety of troubles: diarrhea secondary to steatorrhea, neuropathic paralysis of the colon, vascular ischemia, etc.

A variety of pharmacological agents may paralyze selectively the GI tract and lead to distention and severe functional bowel problems. These include atropine-like agents, ganglionic blocking agents, and many of the drugs used in the treatment of psychotic patients.

Mental retardation may be associated with atony of the small bowel, leading to intestinal pseudo-obstruction, or atony of the colon, leading to megacolon with or without fecal incontinence.

Chronic Idiopathic Intestinal Pseudo-Obstruction

Propulsive disorders without definable systemic disease are labeled chronic idiopathic intestinal pseudo-obstruction (CIIP) in contrast to secondary CIP. Murley,[4] in 1959, first drew attention to CIIP and, a year later, Naish[5] gave the first complete description of this syndrome. In 1961, Paul *et al.*[6] described a second patient with CIIP in association with steatorrhea. Curiously, the first patient showed gross hypertrophy of circular smooth muscle with increased peristalsis; the second, severe atrophy of smooth muscle. Both had a normal myenteric plexus with intact ganglia and similar clinical syndromes. Several groupings of the clinical syndrome with different physiological and structural findings have emerged.

In general, patients with hypoactivity of the bowel in CIIP often have disorders of the smooth muscle, usually with fibrous atrophy. Schuffler[2] and Faulk[8] each described kindreds with various expressions of GI myopathy, sometimes in association with bladder atony, requiring frequent catheterization. In these patients, neurological control mechanisms appeared intact by conventional light microscopy. Terms such as "hereditary hollow visceral myopathy" and "familial visceral myopathy" have been used to describe these patients.

Schuffler and others then reported a brother and sister with chronic pseudo-obstruction, in which hyperactivity of the bowel was noted, as the presenting complaint. At autopsy both had degeneration of the myenteric plexus throughout much of the tubular gut. They proposed the term "visceral neuropathy."

In 1977, Sullivan *et al.*[9] reported the use of manometry and electromyography to study the pathophysiology of radiologically-evident CIIP in four patients. They found some patients with normal responses to hormonal stimuli and normal electromyographic activity, but inappropriate actions following injection of a water bolus. Tissue examination revealed no structural abnormalities of the enteric nervous system. Neuronal dysfunction rather than structural disorder was invoked as a cause of CIIP syndrome in these patients.

In summary, CIIP syndrome may be the end result of several types of smooth-muscle degeneration, of neuronal damage, and of dysfunction without any evidence of structural damage.

Clinical Presentation

The clinical symptoms[2] of chronic intestinal pseudo-obstruction include in nearly all recognizable cases sporadic or chronic vomiting, abdominal distention and, frequently, some degree of abdominal pain. Diarrhea and constipation may alternate, or one may predominate. Heartburn and dysphagia, esophageal symptoms, are more common in PSS and rather rare in the primary syndrome of CIIP. Urinary retention may be a troublesome accompaniment in those with hollow visceral myopathy. Depression understandably is very common.

Malnutrition was found in 26 of 27 patients with CIP,[2] usually because of inability to eat sufficient calories, and also because of significant steatorrhea. The malabsorption feature appears to be due to stagnation of small bowel contents, leading to bacterial overgrowth and secondary deconjugation of bile salts. Vitamin B-12 consumption by the bacteria also plays a role.

Radiological examinations are very helpful. The duodenum and upper small bowel revealed

stagnation in all cases of CIP syndrome reported by Schuffler. These were of varied causes, some as a part of PSS, some with myopathy, some with neuropathy. Nearly all had abdominal scout films showing bowel and stomach dilatation, in many cases indistinguishable from mechanical intestinal obstruction.

The prognosis for patients with CIP depends on the nature of the underlying disease. In those whose bowel problems are secondary to PSS, the mean survival is 7.5 years after diagnosis, but with great variation. Those with myopathy and idiopathic neuropathy may live many years, but with much clinical trouble, manifested by malnutrition, steatorrhea and recurrent pain. Those with diabetic neuropathy will die of complications associated with diabetes.

Management

Management of the syndrome involves principally recognition of its medical nature and avoidance of unnecessary operations. Surgical treatment must be reserved for specific mechanical goals such as removal of a very redundant sigmoid with resultant volvulus. Dietary measures have been of little help in a specific way. No special diet will avoid symptoms, but adequate nutrition is essential. Many patients are intolerant of lactose and should be tried on a diet free of unfermented milk. Nearly all patients with this phenomenon lose weight easily; some are kept alive only by home parenteral nutrition. Those with steatorrhea may benefit from diminishing dietary fat and substituting MCT (medium chain triglycerides) with special attention to supplementary water-soluble forms of Vitamins A, D, K, etc. as well as sufficient minerals.

Those with bacterial overgrowth syndromes are helped clinically by intermittent courses of tetracycline-type, broad-spectrum antibiotics. One also must add sufficient Vitamin B-12 orally or parenterally as well as the other vitamins and minerals. None of the motility-enhancing drugs, including the newest agent, metoclopramide (Reglan), has been of predictable help.

Possible Implications

Finally, it is interesting to speculate that many disorders of the tubular gut are really manifestations of disturbances in the control mechanisms, or in the inherent smooth muscle response. For example, irritable colon and diverticulosis coli clearly result from poorly-directed peristaltic function. In the case of diverticulosis, hypertrophy of circular smooth muscle is evident pathologically in many cases. This may lead to intolerable pressure inside the lumen when badly coordinated circular muscle contractions close off segments of the sigmoid. Compartmentalization takes place and "blow-outs" are encouraged.

Perhaps we shall discover someday that diverticulosis coli is simply a common manifestation of inappropriate control mechanisms which in other patients bring about pseudo-obstruction. Perhaps irritable colon may be similar.

Disorders of the lower esophageal nerve and muscle control functions already are well known as a cause of dysphagia, achalasia, reflex esophagitis and other troublesome symptoms. Similarly, Hirschsprung's chronic colonic obstruction is well recognized to be caused by a segment deprived of myenteric ganglia.

I should like to leave you then with the thought that disorders of the tubular gut are numerous and cause untold patient unhappiness. If focusing on the pseudo-obstruction syndrome will bring these more numerous disorders to our attention, then I shall be satisfied. Thank you.

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A message from . . .

The President

WELFARE FRUSTRATIONS

Since my message on the President's Page of the February issue of *The West Virginia Medical Journal,* I have received several comments relative to services rendered to Medicaid patients—some in the form of letters and others through direct conversations.

Being aware of the problems, I addressed a letter to Commissioner Leon Ginsberg of the West Virginia Department of Welfare on February 5, 1982. The text of this is printed on the President's Page to assure all members of our Association that we are aware of these problems and are working diligently to relieve them.

Since this letter was sent to the Commissioner, I have received a favorable response from him. I also addressed a letter to the Governor outlining our problems with the Department of Welfare, and I received from him a most favorable response appreciating the positive action we are taking in delivering health care to disadvantaged citizens and, at the same time, assuring me that he and the Commissioner agree that many of the frustrations of physicians with the Department of Welfare have caused difficulty in providing services to Medicaid patients. He felt that these problems could be dealt with mutually.

Below is the text of the letter addressed to the Welfare Commissioner:

"Mr. Charles Lewis [Executive Secretary, State Medical Association] forwarded your letter to me. In the letter, you spoke of complaints you received from persons during your visit with the Governor to Mingo county. In my President's Page (*West Virginia Medical Journal*), I have urged my colleagues throughout the state to provide services to all persons, and especially to Medicare-Medicaid patients. Since I have advocated services by my Association, I also realize that there is some justification for lack of cooperation by physicians in West Virginia to treat Medicare-Medicaid recipients.

"Somewhat over a year ago, you devised a new form for providers to fill out after services were rendered. This form has increased many fold the time and cost required to complete one—from a matter of a couple of minutes to fill out the standard form to sometimes 20 to 25 minutes to complete your ill-advised and designed form. Speaking with the secretary in my office, she advises me that just last week she spent an hour on the telephone with your Department trying to get a code number for a procedure that was not listed on your now-coded procedures.

"The next complaint is that, after the forms are completed, a large number are rejected, thereby necessitating again a very time-consuming process of re-submitting.

"Another complaint is that, once the form is completed correctly and in the mail, it may be several months in the process of being paid. To carry this unpaid bill on our books is again an expensive item of overhead. Other third-party payors have turn-around time on insurance forms on receipt of payment from a few days to a few weeks, not months—as many as nine to 12. As you will recall, I have spoken with you about this on several occasions.

"Next, we were told by Insurance Commissioner [Richard G.] Shaw at our August meeting at the Greenbrier that you attended, that for more than a year, a new, standard insurance form has been in use and would be acceptable to all third parties, including the Welfare Department. We are now in February and there is no such action as yet by your Department. I spoke with Doctor [J. L.] Mangus [Medical Director] about this two weeks ago, and his response was the usual bureaucratic nonsense. This is unacceptable to those of us who provide the service. If we are to serve the needs of Medicaid patients in the state, your Department should take every initiative possible to encourage members of the providers' groups, be they physicians, dentists, pharmacists, etc., to do so.

"The above problems tend to discourage, rather than encourage, participation by providers. Unless you and your Department are more cooperative and willing to work with us, you will have more and more complaints; thereby, it will become more and more difficult to convince our Association members that they should indeed minister to Welfare recipients. Correct the criticisms I have outlined and I feel you will see a marked change in the attitude of our members. Uncorrected, the situation can only deteriorate. The choice is yours; the solution lies with you. I look forward to your response and actions."

John B. Markey

John B. Markey, M. D., *President*
West Virginia State Medical Association

The West Virginia Medical Journal

Editorials

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RIP
RICHARD E. FLOOD, M. D.
1915-1982

It is debatable whether there is such a thing as a good day to be buried. By any other measure it was a bad one in Weirton the day they buried Dick Flood. Cloudy and dark, ice and snow, cold, wind and the likelihood of more of the same to come.

But even on such a day the church was almost filled. The sanctuary certainly was with assorted priests and monsignori, seven of them in all.

With his hand on the coffin, Father Moore, the pastor of St. Paul's, started the eulogy, "This member of the family . . . " Nothing could have epitomized Dick Flood as well. A member of everyone's family. The trick was that he quickly could make anyone he met feel a member of the Flood family.

Richard E. Flood was born in Glendale, Pennsylvania, on September 9, 1915. His family moved to Weirton when he was two. High school football prowess led him to Notre Dame in 1933. He graduated from there in 1937, but remained a lifelong fan and unreasoning optimist about Notre Dame athletics. He received his M. D. degree from Jefferson Medical College in 1941.

He served for 42 months in the United States Army in Europe and the South Pacific, returning to the United States a Major and taking up his practice in Weirton.

After wending his way through leadership posts in the Hancock County Medical Society, he was elected to the Council of the West Virginia State Medical Association in 1959. In 1964, he was elected Vice President of the State Association and President Elect the following year. In 1966, he became the 100th President of the West Virginia State Medical Association.

From 1969 to his death, he served in the AMA House of Delegates, where his calm manner and reputation for fairness brought him honors in the form of many responsible committee assignments and numerous friends. There probably are few AMA Presidents in the past decade who have not visited him in his home.

From 1969 to 1979 he was a member of the West Virginia Board of Medicine and, in 1978, served as President of the Federation of State Medical Boards of the United States. Along the way he managed to serve as President of the West Virginia Academy of Family Physicians in 1972.

He was a busy, productive and generous man.

In the eulogy there was a reference to him as "The Godfather." From the pulpit, this surely related to his spiritual qualities and his religious devotion. But it brought a smile to many of his friends in the church. Dick had the nickname of "The Godfather" in State Medical and AMA circles. The term connoted his role of arranging things, taking care of the details and making all the right things happen.

Before the final *Holy God We Praise Thy Name* there were the candles and incense, the psalms and the biblical verses. And then the always magnificent *Dies Irae*. There might very well be a day of wrath for some on that final judgment day, but for Dick Flood? No way.

The sky was lifting and it looked as though the sun might break through as the mourners left the church. Somehow, that, too, seemed fitting. Nicely arranged.

THINK POSITIVE

Another regular session of the West Virginia Legislature has come and gone. For public health, and for those who provide health and medical care, it again was a hectic one. How various issues in this general area were or were not resolved will be, or have been, covered in other information provided the Medical Association membership (see page 109).

The session once again underlined, however, several things relative to physicians and the legislative process. First, doctors—and Medicine—again were on the defensive to far too great

a degree this year. Physicians' offices are the entry, from a general standpoint, to health care. More imagination and positive approaches to such problems as availability and quality of care are a must.

Several legislators stressed that there still is a wide gap between accessibility and quality. As one Kanawha County delegate put it, in perhaps an oversimplification, "Quality of care is fine, but what if the care isn't accessible? And that's still the case in too many parts of West Virginia."

Within the State Medical Association, a long road lies ahead toward developing some strong and specific goals and objectives to give real meaning to an obligation to promote the public health the Association's Constitution assigns the organization. Those goals and objectives then need to be translated into action—including legislative proposals as they might be deemed appropriate.

The Association has some track record to indicate it can accomplish this task. It successfully obtained, in 1980, the first complete rewrite of the state's Medical Practice Act in 99 years. There have been some delays at the state government level in implementing key portions of the act, including those in the disciplinary area, but the legislative goal was accomplished.

Another key question which probably will have to be addressed by the Association, and by others, is the degree to which effective and reasonable *regulatory* approaches should be supported and implemented in lieu of legislation. The struggle with the physician assistant question in the 1982 session is a prime example.

It's the view of administrators like State Health Director L. Clark Hansbarger, M. D., and others that questions as to what physician assistants should and should not be permitted to do from such standpoints as their training should not be resolved in specifics by statute.

Things established by law too often are set to such a degree in concrete that program changes through rule and regulation are difficult, if not impossible. Particularly with regard to still-developing programs, with needs for changes in direction from time to time, critical problems thus arise.

We've seen the proper approach, in the eyes of many—including this Association's leadership—with regard to defining roles appropriately for advanced registered nurse practitioners. These are people with skills that need to be used in the most effective manner *within the over-all health care system, and as a part of the system.*

The Medical Association has been privileged to work with the State Board of Examiners for Registered Professional Nurses for some period of time on the development of appropriate *rules and regulations* toward this goal. Continued flexibility will be a must as this work advances —flexibility that can't be assured by statute.

Maybe the Medical Association needs to begin a study, in concert with Doctor Hansbarger and others, as to how this general concept might be effected. Legislation broadening or liberalizing licensing boards' authority indeed might be necessary. But this appears to be something worthy of thoughtful consideration.

MEDICINE'S SUCCESS CREATES PROBLEM

Is success Medicine's problem? A number of individuals and organizations have suggested that's the case. A somewhat different-from-normal approach to that premise now has come from a leader in organized medicine in another state.

Fred Z. White, M. D., the Illinois State Medical Society President, recently wrote that the ubiquitous discussions on the cost of medical care are justified due to the magnitude and trend of present health care costs.

Certainly, he said, some costs might be excessive and some might be unnecessary. After all, neither our society nor our medical system is perfect. But Doctor White observed that after making note of these things in one analytical part of his mind, he continued to suffer a growing sense of discomfort stemming from several origins:

—The knowledge that Medicine is doing a superb job of prolonging life and improving the quality of life.

—The realization that 80 per cent of health care costs are generated because Medicine has made more years of life possible.

—The realization that we now identify and treat problems early—sometimes in a life-sparing manner that mandates additional treatment later.

Doctor White went into additional detail about patients' expectations that sophisticated testing procedures will be activated on their behalf; society's hopes for unerring diagnoses, treatment and management; but, at the same time, society's reluctance to pay the price of achieving nearly 100-per cent correctness.

GENERAL NEWS

AMA President To Speak At Annual Meeting

Dr. William Y. Rial, who will be installed as President of the American Medical Association in Chicago in June, will speak during the State Medical Association's Annual Meeting in August. Doctor Rial, a family physician from Swarthmore, Pennsylvania, will address the first session of the House of Delegates Thursday afternoon, August 26.

The convention will be held August 26-28 at the Greenbrier in White Sulphur Springs. It will open with a pre-convention session of the Association's Council and the first House session on Thursday morning and afternoon; and end with the second and final House session and reception for new Association officers on Saturday afternoon and evening.

Doctor Rial, an AMA Commissioner to the Joint Commission on Accreditation of Hospitals, was Speaker of the AMA House of Delegates from 1977 to June, 1981, having served previously as Vice Speaker from 1973. He became an Alternate Delegate to the House in 1964 and a Delegate in 1968.

The current AMA President Elect began his service to organized medicine in 1956, when he became Secretary-Treasurer of the Delaware County (Pennsylvania) Medical Society. That same year he assumed the Presidency of the Delaware County Academy of Family Physicians. In 1966, he was elected President of the Delaware County Medical Society, and became Speaker of the Pennsylvania Medical Society's House of Delegates. Doctor Rial has served as Vice Speaker of the Congress of Delegates of the American Academy of Family Physicians, and is a Fellow of the Philadelphia College of Physicians.

Engineering Degree Earned First

Born in Newton Lower Falls, Massachusetts, he pursued a degree in engineering until his career was interrupted by World War II and, while serving in the South Pacific, he became interested in medicine. After earning his engineering degree at the University of Pittsburgh in 1946, he entered the School of Medicine there and obtained his M. D. degree in 1950. He served his internship at the U.S. Navy Hospital in St. Albans, New York.

Doctor Rial is a Diplomate of the American Board of Family Practice, and was recertified in 1977.

His academic appointments include those as Clinical Assistant Professor of Medicine for General Practice at the Medical College of Pennsylvania, a position he had held since 1965, and, since 1977, Clinical Assistant Professor, Physician's Assistant Program at Hahnemann Medical College in Philadelphia.

He is on the active medical staff of Taylor Hospital in Ridley Park, Pennsylvania.

Doctor Rial's community involvement includes membership in the Philadelphia Area Health Care Cost Containment Committee, member of the Board of Governors of the Philadelphia

William Y. Rial, M. D.

Academy of Sciences, and a member of the National Advisory Committee of the Health Management Center of the Leonard Davis Institute of the University of Pennsylvania.

He and his wife, Constance, have four children: David, Christopher, Craig and Gretchen.

Scientific sessions will be held Friday morning and Saturday morning, with opening convention exercises to precede the Friday morning session.

Speaker on Dizziness

As announced previously, Dr. Malcolm D. Graham from the University of Michigan will speak on "Dizziness: Current Thoughts on Diagnosis and Management" as part of a "Symposium on Common Disorders of the Eye, Ear and Mouth" Friday morning. Doctor Graham is Professor and Vice Chairman, Department of Otorhinolaryngology at the University.

Dr. Henry A. Wise II, also as announced previously, will present a paper on "Recent Advances in Urology" during the second scientific session Saturday morning. Doctor Wise is Director and Associate Professor, Division of Urology, Department of Surgery at Ohio State University.

Other topics for the Saturday morning scientific session will cover new developments and/or trends in sports medicine, plastic surgery and neurology-neurosurgery.

About a dozen sections and affiliated societies will have business and scientific sessions on Friday and Saturday, primarily in the form of breakfast and luncheon meetings.

Dr. Harry Shannon of Parkersburg, during the second House session on Saturday, will be inaugurated as President to succeed Dr. John B. Markey of Charleston.

Program Committee

Serving on the Program Committee are Drs. Carl J. Roncaglione, South Charleston, Chairman; Jean P. Cavender, Charleston; Thomas P. Long, Man; David Z. Morgan, Morgantown; Kenneth Scher, Huntington, and Doctor Shannon.

The Annual Meeting of the Auxiliary to the State Medical Association, with Mrs. Logan W. Hovis of Vienna in charge as the Auxiliary's President, again will run concurrently with the Association's convention.

More specific information relative to other general session topics and speakers will be provided in upcoming issues of *The Journal.*

Doctor Jones Named To WVU Health Sciences Post

John E. Jones, M. D., Dean of the West Virginia University School of Medicine for the past eight years, has been named WVU Vice-President for Health Sciences.

Doctor Jones was appointed by President Gordon Gee to fill the vacancy created by the resignation of Charles E. Andrews, M. D., last July. Dean W. Robert Biddington of the School of Dentistry has served as Interim Vice-President, and was commended by President Gee for his service.

John E. Jones, M. D.

Doctor Jones will assume his new post on April 5. A search committee will be appointed to propose names for a new Dean of Medicine.

"John Jones has served the School of Medicine, and through it the state of West Virginia, for more than 20 years," President Gee said. "During his tenure as Dean, the School has strengthened the quality of its educational and research programs.

"The fact that we found within our own institution a man of his exceptional abilities to assume the Vice-Presidency is a source of much satisfaction to me. . . ."

Doctor Jones, 51, who was born in Mount Pleasant, Utah, grew up in Utah and California. He completed his undergraduate work at the University of Utah and received his M. D. degree from that university's College of Medicine in 1955.

He did his residency training in internal medicine at the University of Minnesota Hospitals and joined the WVU medical faculty in 1961, a year before the new school granted its first M. D. degrees.

Dean of Medicine in 1974

He was Chief of the Division of Metabolism-Endocrinology by 1967, full Professor in 1970, Acting Chairperson of the Department of Medicine in 1972, Acting Dean of Medicine the next year, and became Dean in 1974.

He is the author or co-author of 75 scientific papers, abstracts and book chapters covering a wide range of research.

Doctor Jones noted that the School of Medicine recently was visited by an accreditation

team from the national Liaison Committee on Medical Education and received a highly favorable report.

"The site team recognized the high quality of our programs educationally and the increased strength of our research effort, which underpins those programs," he said.

After its last visit five years ago, the team suggested that the school's research effort needed to be strengthened, "while this time they found its quality substantially improved."

Doctor Jones was recruited to WVU by Dr. Edmund B. Flink, first Chairperson of the School's Department of Medicine and now Benedum Professor of Medicine. Doctor Flink had taught Doctor Jones during his residency training at Minnesota.

Navy Service

Doctor Jones' specialty training in internal medicine and subspecialty education in metabolism-endocrinology was interrupted by two and a half years of Navy service starting in 1957. It included four months of training in nuclear medicine at the Naval Medical School.

At WVU, he twice has been elected Chief of Staff of the University Hospital medical and dental staff. He is a Fellow of the American College of Physicians, and served as West Virginia Governor of that organization from 1975 through 1979.

Doctor Jones also has been active in affairs of the Association of American Medical Colleges and the Educational Commission on Foreign Medical Graduates.

Chicago VA Surgery Chief To Speak In State

The West Virginia Chapter, American College of Surgeons and the West Virginia Gastrointestinal Society will meet April 29-May 1 at the Greenbrier in White Sulphur Springs.

Phillip Donahue, M. D., Chief of Surgery at the Veterans Administration Medical Center in Chicago, will be the featured speaker.

The title of Doctor Donahue's paper on Thursday, April 29, will be "Evolution of Diagnostic and Therapeutic Endoscopy;" his subject for Friday, "Surgeons as Endoscopists: 1. Postoperative Syndrome After Upper Gastrointestinal Surgery. 2. The Intraoperative Endoscopy."

For registration and other information, contact the office of Dr. Alvin L. Watne, West Virginia University Professor and Chairman of Surgery, the Secretary-Treasurer of the surgeons' group. Telephone (304) 293-3311.

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1982, as compiled by Dr. Robert L. Smith, Assistant Dean for Continuing Education, and J. Zeb. Wright, Ph. D., Coordinator, Continuing Education, Department of Community Medicine, Charleston Division. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of The Journal.)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Morgantown, Charleston and Wheeling campuses. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, 3110 MacCorkle Avenue, S. E., Charleston 25304; Office of Continuing Medical Education, WVU Medical Center, Morgantown 26506; or, Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

April 1, Charleston, Psychological Disorders in the Elderly

April 2-3, Morgantown, 18th Annual Cancer Teaching Days

April 23-24, Morgantown, Orthopedic Reunion Days

June 4-5, Morgantown, Anesthesia Update '82

June 5, Charleston, Ninth Annual Bert Bradford Wildwater Surgical Conference

June 11-12, Morgantown, Eighth Annual ENT Teaching Days

Regularly Scheduled Continuing Education Outreach Programs from WVU Medical Center/ Charleston Division

Buckhannon, St. Joseph's Hospital, 3rd floor, 3rd Thursday, 7-9 P. M.—April 15, "Substance Abuse: Food, Alcohol & Drugs," David K. Walker, M. D. (Public Session, 6:30-7:30 P. M.; Outreach Session, 7:30-9:15 P. M.).

May 20, "Hypertension and Cardiac Drugs: Interaction," Carl Malanga, Ph.D.

(continued on next page)

June 17, "Poison Control," Kathryn Sensabaugh, R. N.

Cabin Creek, Cabin Creek Medical Center, Dawes, 2nd Wednesday, 8-10 A. M.—April 14, "Treatment of Diet-Resistant Diabetics," Stephen Grubb, M. D.

May 12, "Common Musculo-Skeletal Problems in Children," Robert Ghiz, M. D.

Gassaway, Braxton Co. Memorial Hospital, 1st Wednesday, 7-9 P. M.—April 7, "Update: Primary Care Pediatrics," Herbert Pomerance, M. D.

May 5, "Diagnosis and Management of Common Dermatological Problems," Robert B. Point, M. D.

June 2, "Ambulatory Rheumatology," John W. Byrd, M. D.

Madison, Allied Health Room, Boone Career Center, West Madison, 2nd Tuesday, 7-9 P. M. —April 13, "Drug Therapy and Interaction in the Geriatric Patient," Robert Hoy, Pharm. D.

May 11, "Rheumatology Update: Drug Therapy & Management," John W. Byrd, M. D.

June 8, "Blood Disorders: Diagnosis, Treatment & Referral," Steven Jubilerer, M. D.

Oak Hill, Oak Hill High School (Oyler Exit, N 19) 4th Tuesday, 7-9 P. M.—April 27, "ENT Update," Ronald Wilkinson, M. D.

May 25, "Diagnosis & Management of Diabetes," Daniel B. MacCallum, M. D.

June 22, "Pediatric Oncology: New Hope," Jean Ross, M. D.

Welch, Stevens Clinic Hospital, 3rd Wednesday, 11 A. M.-1 P. M.—April 21, "Thyroid Disease," Richard Kleinmann, M. D.

May 19, "Infectious Diseases in Children," Edwin Anderson, M. D.

June 16, "Introduction to Calcium Blockers," Stafford Warren, M. D.

July 21, "Anxiety: The Therapeutic Dilemma," Richard Koon, M. D.

Whitesville, Raleigh-Boone Medical Center, 4th Wednesday, 11 A. M.-1 P. M. — April 28, "Classification & Diagnosis of Diabetes Mellitus," Stephen Grubb, M. D.

May 26, "Diagnosis and Treatment of Chronic Alcoholism" (film series from Dartmouth Medical College).

Williamson, Appalachian Power Auditorium, 1st Thursday, 6:30-8:30 P. M.—April 1, "Eye Trauma," George Hamrick, M. D.

May 6, "Anxiety: The Therapeutic Dilemma," Sid Lerfald, M. D.

Dr. Barbara Jones Appointed Head of WVU Pediatrics

Barbara Jones, M. D., recognized by her colleagues as one of West Virginia University's outstanding physicians, has been appointed Chairperson of the Department of Pediatrics in the WVU School of Medicine.

Doctor Jones, a member of the Medical Center staff for more than 20 years, succeeds Dr. William G. Klingberg, who this year reached retirement age for department heads. He will continue to see patients and will remain as Professor of Pediatrics.

Barbara Jones, M. D.

Doctor Jones is a former Chief of Staff for WVU Hospital, has received two WVU Outstanding Teacher Awards, and is author or co-author of 65 journal articles or papers. She is a specialist in childhood tumors and leukemia and a frequent speaker at national and international conferences.

She joined the WVU medical faculty in 1961 as an Assistant Professor of Pediatrics, became full Professor in 1968, Assistant Chairperson 18 months later and Associate Chairperson in 1979.

(continued on next page)

Review A Book

The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal*, Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication.

General Urology, 10th Edition, by Donald R. Smith, M. D. 598 pages. Price $19.50. Lange Medical Publications, Los Altos, California 94022. 1981.

Current Medical Diagnosis & Treatment 1982, by Marcus A. Krupp, M. D.; and Milton J. Chatton, M. D. (with associate authors). 1,113 pages. Price $23. Lange Medical Publications, Los Altos, California 94022. 1982.

The WVU Hospital staff elected her as Chief of Staff in 1978 and again in 1979, and, in 1980, she was elected President of the Monongalia County Medical Society. She served as Chairman of the West Virginia Chapter of the American Academy of Pediatrics from 1970 to 1976 and, in 1981, was elected Alternate Chairman of District 3 of the AAP.

University of Utah M. D. Degree

A native of Salt Lake City, Doctor Jones received her bachelor's degree from Stanford University and her medical degree from the University of Utah in 1952. She did her pediatric residency training at St. Louis Children's Hospital, and also is certified in the subspecialty of hematology-oncology. She taught at Washington University in St. Louis for six years before joining the WVU medical faculty.

She is a member of 18 professional and scientific societies, and last year, during a sabbatical leave, served as a Visiting Scholar at the Kennedy Institute of the Center for Bioethics at Georgetown University in Washington, D. C.

Doctor Jones has been active in the American Cancer Society's West Virginia Division, and serves on the national Wilm's Tumor Committee and the Pediatric Oncology Group. She was a medical consultant for the Head Start Program.

Her research, starting during her medical school years, covers a wide range of childhood diseases and related scientific areas, with emphasis on leukemia, chemotherapy and various childhood tumors.

She has presented papers at scientific and medical conferences in the United States and in Portugal, Thailand, Turkey and Taiwan.

Senate Confirms Physicians For State Agency Roles

Governor Rockefeller's nomination or renomination of several physicians to serve on state boards and commissions were confirmed by the State Senate during the recent legislative session.

The group includes:

Drs. Harry S. Weeks, Jr., (reappointment) of Wheeling, I. Frank Hartman II of Buckhannon and Robert C. Gow of Elkins, West Virginia Board of Medicine; Pat A. Tuckwiller, Charleston, Board of Examiners for Licensed Practical Nurses; John S. Cook, Jr., of Welch and Gina M. Puzzuoli, Charleston, West Virginia Board of Health; and I. A. Wiles, Morgantown, Commission on Aging.

Other Board of Medicine members confirmed include the Rev. Richard Boyer of Fairmont, a lay representative; and Bill P. May (reappointment) of Huntington and Leonard Simmons, Fairmont, both doctors of podiatry.

The Board of Medicine was subjected to substantial criticism by members of the Senate's Committee on Confirmation for what legislators felt was—on the basis of a report submitted by the Board as required by law—lack of evidence that the Board is exercising acceptable disciplinary authority in the general area of its responsibilities.

Questioning at times became heated during one Committee meeting at which some of the Board nominees appeared at the request of legislators. Separate consideration was given some nominees at a later meeting at which the committee recommended to the full Senate all of the Governor's 110 nominations. All 110 subsequently were confirmed.

Legislature Puts Pressure On Hospitals, Medicine

A bill to establish a West Virginia Hospital Cost Containment Commission to review and set hospital rates—including charges in the area of contract physicians—was tabled 20-14 on the Senate floor, but health care costs, as well as catastrophic illnesses, loom as subjects for a between-sessions study . . .

Hospitals will be required to provide, on request by a patient or an estate of a deceased individual, one itemized statement of charges for specific services provided—and proceedings of governing boards of hospitals owned or operated by a non-profit corporation or association, or local government unit, will be open to the public . . .

House-passed legislation to require hospital governing boards to have at least 30-per cent consumer representation from areas of business, organized labor, elderly persons and low-income consumers, with at least one woman, failed on the Senate floor in the closing hours . . .

Bills to provide funding for financial disclosure legislation relative to hospital income and expenditures enacted by the 1979 Legislature never emerged even from committee . . .

Hospital service, medical service and dental service corporations (Blue Cross-Blue Shield) will be authorized to merge into single health service corporations, with such corporations permitted to broaden areas of insurance activity—

and with long-standing responsibility of providers (doctors, dentists and hospitals) for any BC-BS deficits removed from the statute . . .

Type A physician assistants will have one seat on a 15-member West Virginia Board of Medicine, along with an additional lay person for a total of three—*but will NOT have any prescription authority . . .*

These are some of the highlights of another hectic legislative session that once again brought strong expressions of concern relative to health care costs; a strong tide of so-called consumerism, *and an atmosphere which once more found Medicine far too much on the defensive.*

Consumerism Philosophy

The consumerism element was paramount in the physician assistant enactment, with a House committee amendment adding an additional lay person plus a PA to the Board of Medicine to increase membership from 13 to 15. The Board will continue to have as members eight doctors of medicine, two doctors of podiatry and the State Health Director (also now an M. D.), along with three lay members and the PA.

A "taxation without representation" type of question came to the fore relative to PA representation on the Board since current statute specifically mandates that the Board shall certify, regulate and discipline PAs, along with licensing, regulating and disciplining doctors of medicine and podiatry.

Medicine also was entangled to varying degrees in the legislative pressure directed in unprecedented manner upon hospitals. The open meetings bill almost certainly will be tested in the courts on the question of legislative authority to direct how non-profit community hospital boards may or may not conduct their meetings.

We shall endeavor, in subsequent issues of The Journal, to cover in more detail legislation enacted this year. About 1,715 bills were introduced in House and Senate, with Executive Secretary Charles R. Lewis and Staff Counsel Bob Bible carrying the load of taking particular note of, and/or dealing in varying degrees with, more than 100 of those bills. Analysis of some of the more detailed measures, particularly those enacted in the Legislature's final hours March 13, will take time.

The 1982-83 Budget

The Budget Act for 1982-83 has pluses and minuses. The Department of Welfare Account includes $50,840,000 in state funds for medical services programs, up $1 million over the Governor's request. The Department has $48,411,000 to work with this year, including a $1 million supplemental appropriation to keep a limited pharmacy program in operation through June 30.

The Department of Health will be hard-pressed to continue some of its services, with limited money for, among other things, allocations to local health departments. The authorization in a West Virginia University Medical School account for subsidization of residency training programs remains virtually unchanged at $945,000 for support programs at community hospitals and $828,000 for the family practice program—but the appropriation from general revenue is down about $260,000 for these items. That means WVU will have to look toward fees or other sources of revenue to make up the difference if the programs are continued at the current levels.

Other New Enactments

Other bills passed:

—Update the state's controlled substances act.

—Reinstitute legislative review of rules and regulations promulgated by administrative agencies (an earlier process was thrown out by the courts as violating the constitutional separation of powers principle, and the new act was approved in an override of the Governor's veto).

—Authorize the Department of Welfare to subpoena witnesses and documents in Medical Assistance Program hearings.

—Add tests for galactosemia to those already required for newborn infants (supported by the State Medical Association).

—Set up a new program for reporting congenital physical and mental impairments in newborns to the State Department of Health, and establish a registry, with protection of confidentiality, designed to obtain early potential assistance for such children (supported, also, by the Medical Association).

—Generally require parental notification prior to an abortion involving a girl under 18 years of age, with provisions making an abortion by one not licensed as a physician a felony carrying as a penalty upon conviction a fine of up to $10,000 and up to 10 years in prison, or both (Indiana has a similar new parental notification statute).

—Authorize local boards of health to assess fees for certain permits and licenses they issue, but not for health services.

—Set up a mechanism built around services offered by welfare, health, aging, insurance and vocational rehabilitation agencies to coordinate

continuum of care programs for the elderly, impaired and terminally ill.

—Assist Vietnam and Korean veterans in making claims for exposure to chemical defoliants or herbicides such as Agent Orange; and provide for a reporting procedure to be followed by physicians and hospitals, upon patient request, of suspected exposure to the State Health Department.

—Prohibit the sale, use or possession of drug paraphernalia; set up a licensing procedure for sale of certain items, and provide for penalties.

Additional Bills Rejected

Bills NOT passed finally included those designed to:

—Provide county courts with authority to create health authorities as public corporations to provide unlimited types of "public health services" (strongly opposed by the State Medical Association as a clear model for socialized medicine).

—Add to the statute a West Virginia Clean Indoor Act.

—Consolidate basic sciences courses of West Virginia University and Marshall University Schools of Medicine at WVU by December 31, 1983; and terminate the West Virginia School of Osteopathic Medicine by July 1, 1984 (beaten on the House floor 63-31).

—Prohibit physicians from charging a fee for consultation services without written consent for such consultation and charges from the patient, or next of kin if patient could not provide such authorization (Medical Association opposed because bill had no provisions for emergency situations and clearly would create more problems than it might resolve).

—Mandate 100 hours of continuing medical education, as defined by the Board of Medicine, as a requirement for biennial relicensure of doctors of medicine and podiatrists (Medical Association opposed the bill as introduced).

—Write into statute provisions of the hospital patient bill of rights now in effect in virtually every hospital, and required in Joint Commission on Accreditation of Hospital requirements (Medical Association opposed the bill as unnecessary).

—Require Senate confirmation of lay persons nominated by the Governor to health professional licensing boards.

—Permit mobile intensive care paramedics to dispense certain insect sting retardants/medication (this might now be possible under rule and regulation).

—Require a pharmacist to sell a brand-name drug at the current price of a generic substitute properly prescribed and requested by a consumer if the generic substitute cannot be provided.

—Provide for exemption from the mandatory school immunization law on the basis of religious beliefs (always strongly opposed by the Medical Association and local health officers).

—Permit the manufacture and prescription of dimethyl sulfoxide (DMSO) under regulation by state boards of health and pharmacy (Medical Association opposed the bill in a public hearing and otherwise).

—Increase the dollar thresholds for Certificate of Need Law exemptions for purchase or acquisition of major medical equipment to bring the state statute in line with current federal law (Medical and hospital associations supported this bill, which was passed by the House but died in a Senate committee).

—Establish a uniform procedure for state licensing boards relative to licensing and handling of fees (State Board of Medicine had problems with this bill).

—Allow the Chief Medical Examiner or other authorized person to provide corneas to the Medical Eye Bank of West Virginia pursuant to performing autopsies.

—Establish a West Virginia Medical Laboratory Act with numerous provisions for State Department of Health licensing and regulation (opposed by several segments of the physician community).

—Reconstitute the Commission of Medical Examiners, make the Medical Examiner again (as law formerly provided) an appointee of the Commission; broaden the office's scope of responsibility, and upgrade qualifications for the examiner.

—Require all hospitals to have an interpreter and a communications device for deaf patients.

—Establish a corrections mental health center with a psychiatrist with clinical experience in mental health and dealing with the criminally insane as psychiatric clinic director.

Medicaid Patient Patterns Headed For Change?

Some new Department of Welfare statistics developed for 1981 show an almost equal use by Medicaid patients of hospital emergency room and outpatient visits to physicians' offices.

"Because of new policies on emergency room reimbursement, and the modest increase (from $7 to $10 per visit) in fees for outpatient services by physicians in their own offices, these figures ought to change significantly this year," Welfare Commissioner Leon H. Ginsberg observed.

He also noted that the statistics "do support some of the things Dr. (John B.) Markey wrote in his last message (the President's Page in the February issue of *The Journal* in which Doctor Markey again urged physicians to 'treat all patients regardless of category')."

Here are per-recipient figures developed by the welfare agency for the Medicaid Program last year:

Ten and one-half prescriptions per year; 2.25 physician office visits; 2.34 hospital emergency room visits; 0.29 hospital admissions; 1.04 hospital days; 1.30 dental services; 0.73 vision services, and 0.39 laboratory, x-ray services.

Counseling Association Plans Huntington Meeting

Dr. John B. Markey of Charleston, President of the State Medical Association, will be the dinner speaker on Saturday, April 17, in Huntington, for the sixth annual meeting of the American Counseling Association.

Dr. Robert J. Wilkinson, Jr., Ms.D., of Roanoke, Virginia, Secretary, also will speak.

Dr. Mildred M. Bateman, Professor and Chairman of the Department of Psychiatry at Marshall University Medical School, will succeed Rev. Hubert N. Air, Jr., of Palmer, Massachusetts, as President at the conclusion of the meeting on Sunday, April 18.

Cardiologists To Meet

Atlanta will be the site of the American College of Cardiology's (ACC) 31st annual scientific session, a five-day educational program featuring symposia, contributed papers on original investigations, "controversies in cardiology," core curricula, and special lectures. The meeting is slated for April 25-29.

Medical Meetings

April 14-16—Am. Society for Artificial Internal Organs, Inc., Chicago.

April 16-18—WV Chapter, AAFP, Morgantown.

April 22-23—WV Chapter, Am. Academy of Pediatrics, Morgantown.

April 25-27 — Am. Society of Clinical Oncology, St. Louis.

April 25-29—Am. College of Cardiology, Atlanta.

April 26-29—Am. College of Obstetricians & Gynecologists, Dallas.

April 29-May 1—WV Chapter, Am. College of Surgeons & WV Gastrointestinal Society, White Sulphur Springs.

May 2-5—WV Academy of Ophthalmol. & Otolaryngol., White Sulphur Springs.

May 5-6—Am. Society for Head & Neck Surgery, Palm Beach, Fla.

May 6-9—NC Med. Society, Pinehurst.

May 10-14 — Am. Roentgen Ray Society, New Orleans.

May 13-16 — Federation of State Medical Boards, New Orleans.

May 14-15—Cystic Fibrosis Foundation, Washington, D. C.

May 16-20—Am. Urological Assn., Kansas City, Mo.

May 21-22 — Phacoemulsification-Extracapsular/Posterior Chamber Implant (Blaydes Foundation), Bluefield.

June 13-16 — Am. College of Surgeons, Gleneden Beach, OR.

June 13-17 — Annual Meeting of AMA House of Delegates, Chicago.

June 13-18—2nd. Annual School on Behavioral Health Studies (WV Dept. of Health, etc.), Morgantown.

Aug. 26-28—115th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Aug. 30-Sept. 2—Am. Hospital Assn., Atlanta.

Sept. 30 - Oct. 2 — Women's Health Conference (WVU), Morgantown.

Oct. 4-7—AAFP, San Francisco.

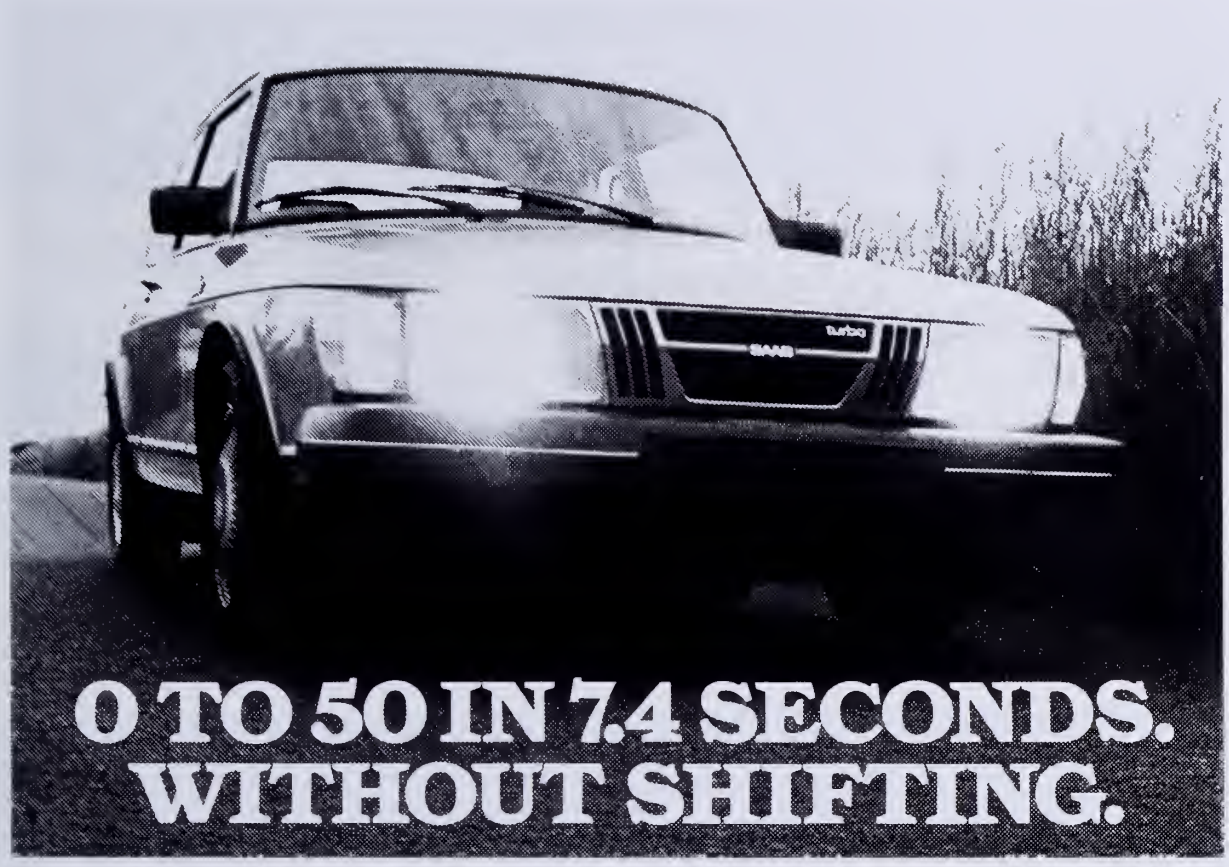
Oct. 22-24—PA Med. Society, Philadelphia.

Oct. 23-28—Am. Academy of Pediatrics, New York City.

Oct. 30-Nov. 2—Southern Med. Assn., Atlanta.

Nov. 4-6—Am. Cancer Society, New York City.

Nov. 10-14—Med. Society of VA, Williamsburg.



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WVU Medical Center
–News–

Compiled from material furnished by the Medical Center News Service, Morgantown, W. Va.

WVU Medical Graduate Finally Gets High School Diploma

Jesse Samuel Griffith knows what it means to do it the hard way. An Army flight surgeon and medical graduate of WVU, he finally has won his high school diploma—30 years after he flunked out of Charleston High School in the 10th grade.

Colonel Griffith is the only person to graduate from the WVU School of Medicine without graduating from high school.

Despite that gap, after Army service during the Korean war he entered WVU as a probationary undergraduate student. And after earning all A's in science courses and a 3.8 grade-point average overall during two years of pre-med, he was admitted as a member of the first class of the then new four-year School of Medicine in 1958. Earlier he had been elected to national honoraries in chemistry, pharmacy and pre-medicine.

Colonel Griffith's story is told in a recent issue of The Army Flier, published for personnel at Fort Rucker, Alabama, where he is stationed as a flight surgeon at the Army Safety Center.

Not Sure Why He Failed

He still isn't sure why he failed in the 10th grade.

"No one was ever unkind to me or mistreated me," he told The Flier. "I was a polite, disciplined kid, and I believe the teachers liked me —they just couldn't get things through my thick head."

Eventually, he was asked to leave school. "I really believed I was dumb," he said.

The events of 1950 resurfaced last year when Colonel Griffith was invited to attend the 30th reunion of the Charleston High class of 1951—even though he should have graduated with the class of 1950.

"I thought it was funny to receive an invitation to a class reunion for 'abject stupidity,'" he said.

After examining all the circumstances, the local board of education and high school Principal John K. Clendenin decided that he met all the requirements to receive his high school diploma as a member of the Class of 1981. The class of '51 also made him an honorary member.

"It's nice to have a high school diploma," he told The Flier. "It wipes out that failure far better than an M. D. diploma."

Consultation Calls To WVU Continue To Increase

About one of every 10 of West Virginia's 2,000 physicians is taking advantage of the telephone consultation service offered by WVU Medical Center.

Statistics for the first three years of the program show that 192 doctors located in 45 of the state's 55 counties have used the service since 1979.

Consultation requests numbered 603, meaning physicians who use the service have averaged three calls each. The number of calls has increased each year.

Dr. Robert L. Smith, Assistant Dean of the School of Medicine and Director of its continuing education program, said 87 per cent of the calls came from primary care physicians including those in family or general practice, internal medicine or pediatrics.

The program was established to let practicing physicians take advantage of the expertise available among the 185 members of the WVU School of Medicine faculty. It is designed to put the caller in quick touch with the proper specialist.

Callers also may receive current literature relevant to the consultation question, and by writing up a case report on the patient may receive continuing education credit as well as written comments from the consultant.

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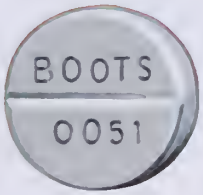

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INDICATIONS AND USAGE SU-TON contains pentylenetetrazol which may be helpful in the older patient as an analeptic agent when mental confusion and memory defects are present. SU-TON also contains vitamins, trace minerals, and iron, for those patients who may benefit by preventing the development of a deficiency

CONTRAINDICATIONS Epilepsy, convulsive disorders or known history of sensitivity to any of the listed active ingredients

WARNINGS The safety of this preparation during pregnancy and lactation has not been established Use of this drug requires that the physician evaluate the potential benefits of the drug against any possible hazard to the mother and child

PRECAUTIONS Although there are no absolute contraindications to pentylenetetrazol, it should be used with caution in epileptic patients or those known to have a low convulsive threshold or a focal brain lesion. Caution should be exercised when treating patients with high doses of SU-TON who have heart disease While pentylenetetrazol does not act directly on the myocardium, the results from central vagal stimulation could cause bradycardia

ADVERSE REACTIONS Pentylenetetrazol in high doses may produce toxic symptoms typical of central nervous system stimulants, which act on the higher motor centers and the spinal cord Convulsions resulting from this drug are spontaneous and are not induced by external stimuli They usually last for several minutes and are followed by profound depression and respiratory paralysis Death has been reported from the ingestion of 10 grams of pentylenetetrazol

DRUG ABUSE Drug dependence has not been reported with SU-TON

OVERDOSAGE Signs and symptoms of acute overdose may be due principally from overstimulation of the central nervous system and from excessive vasodilatation with resulting autonomic nervous system imbalance The symptoms may include the following vomiting agitation, tremors hyperreflexia, sweating, confusion, hallucinations headache, hyperpyrexia tachycardia Treatment consists of appropriate supportive measures If signs and symptoms are not too severe and the patient is conscious, gastric evacuation may be accomplished by induction of emesis or gastric lavage Intensive care must be provided to maintain adequate circulation and respiratory exchange

DOSAGE AND ADMINISTRATION One tablespoonful (15 ml) 3 times a day 20–30 minutes before meals This drug is not for use in children under 12 years of age

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Third-Party News, Views and Program Concerns

Proper Care At Reasonable Cost Goal In AMA Statement

"There is a need for an evaluation of long-term health policies that will provide proper care for our citizens within the available national resources," the American Medical Association said in a policy statement addressed to Congress in March.

Presented when the AMA testified before the House Ways and Means Health Subcommittee at a hearing on Medicare budget cuts, the statement continued, "The Association is undertaking such an evaluation and will make recommendations concerning health care, both long and short term, to help accomplish the necessary and desirable objective of restoring a sound fiscal condition to our country."

In an earlier discussion of the statement at the AMA's National Leadership Conference in late February, Dr. Joseph F. Boyle, Chairman of the Board of Trustees, said the Board is committing itself to a national health policy based on priorities and to the position that these priorities must be established with the advice of the medical profession. "We can't restructure these programs properly by slicing off pieces salami-like," he commented.

Change Marketplace Incentives

Dr. Daniel T. Cloud, AMA President, also addressing the leadership conference, pointed out that "What we're *not* talking about is containing health care costs because when you do that you necessarily have to contain its quality, its availability, or both . . . What we are talking about is restraining cost increases by voluntarily changing marketplace incentives to prevent the unnecessary or inappropriate use of expensive services and personnel—but without reducing quality."

AMA Executive Vice President James H. Sammons, M. D., reminded the conference participants that the demand factors in health care and the programs responding to them "were set in motion in the late 40s, the 50s, and the 60s," when "as a society we thought there was nothing we couldn't do, nothing we couldn't have, and nothing we couldn't pay for." Now, he said, "Our society has come upon tough economic times and hence upon tough social and political times. There are some things we can't do. There are some things we can't have. And there are some things we can't afford to pay for." The AMA Federation's involvement in health care coalitions gives physicians the opportunity to "voluntarily shape rational cost restraints that assure patients of access to quality care at reasonable cost."

Use Only When Real Need, Card Holders Urged

Medicaid card holders have been asked to use the card only when there is a real need.

A notice to this effect recently was sent to all card holders by the West Virginia Department of Welfare. Following is the text of the notice:

Dear Friend:

A few years ago our nation was faced with a shortage of gasoline. The American people faced restriction in automobile transportation.

The American people cut back pleasure trips, carpooled, and observed a 55 mile-per-hour speed limit to save fuel for necessities.

Now we are faced with another shortage. Resources to fund hospital, doctor and pharmacy services are in short supply.

You can help by restricting your use of the Medicaid Program to the most essential services. And, by your voluntary cooperation, you will be doing your part to ensure that Medicaid will be there when it is most needed.

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Obituaries

CHARLES F. McCORD, M. D.

Dr. Charles F. McCord, Welch ophthalmologist, died on February 12. He was 59.

Doctor McCord, a member of the staff of Stevens Clinic Hospital in Welch, was a general practitioner in Bradshaw (McDowell County) for five years, and then served on the staff of the former Grace Hospital in Welch before opening private practice there in 1977.

A native of Muncie, Indiana, he received his M. D. degree in 1949 from the University of Maryland, interned at the Edward W. Sparrow Hospital in Lansing, Michigan, and took a residency in ophthalmology at Charity Hospital in New Orleans from 1957 to 1960.

Doctor McCord, a veteran of World War II and the Korean War, was a Past President of the McDowell County Medical Society and current Treasurer at the time of his death. He also was a member of the West Virginia State Medical Association; American Medical Association; West Virginia Academy of Ophthalmology and Otolaryngology; American Academy of Ophthalmology; Society of Contemporary Ophthalmology; Contact Lens Society, and Southern Medical Association.

Survivors include the widow; the mother, Mrs. Mary M. Woods of Mishawaka, Indiana; three sons, Michael D. McCord of Lampertheim, West Germany; Charles F. McCord, Jr., of Corvallis, Oregon, and Robert McCord, a student at Virginia Tech in Blacksburg; and one daughter, Mrs. John Parker of Elkhart, Indiana.

* * *

ERNESTO M. NAVATO, M. D.

Dr. Ernesto M. Navato of Oak Hill died on February 8 at his home there. He was 51.

A family physician, Doctor Navato's office was in Fayetteville. He previously had been located in Logan and Weirton.

A native of Manila, the Philippines, he received his M. D. degree in 1957 from the University of Santo Tomas in Manila. He interned at Prospect Heights Hospital in Brooklyn, New York, and completed a residency at St. Anne's Hospital in Fall River, Massachusetts.

Doctor Navato was a member of the Fayette County Medical Society and the West Virginia State Medical Association.

Survivors include the widow; four sons, Edimone, Eric, Edwin and Ermine Navato, all of Oak Hill; the parents, Gil and Besilies Navato of the Philippines; three brothers, Ricardo Navato, Gil Navato, Jr., and Jaime Navato, all of the Philippines; and a sister, Mrs. Corzan Enriquez of the Philippines.

* * *

JOHN MAJERNICK, M. D.

Dr. John Majernik, Weston State Hospital physician since March, 1979, died on February 2 in a Weston hospital. He was 61.

A native of Czechoslovakia, he also had practiced in Wheeling.

Survivors include the widow; two sons, John Majernik of Vatican City, Rome, Italy, and Peter Majernik of Weston, and a sister, Mrs. Anna Mandzjuk of Czechoslovakia.

Book Review

SOMETHING HIDDEN: A BIOGRAPHY OF WILDER PENFIELD (Canadian Brain Surgeon) — Jefferson Lewis. 311 pages. Price $17.95. Doubleday & Company, Inc., 245 Park Avenue, New York, New York 10017. 1982.

The reviewer expected to skim this book to decide whether or not to read it at leisure, but from the first few pages was hooked, and read it through from beginning to end.

The book is a biography of Wilder Penfield, boy, man and elder statesman. It does not deal in detail with his accomplishments as a neurosurgeon or physician: there are no patient histories or itemization of scientific papers. What it does do is to describe his evolution as a person. It does it well.

The book won't have a wide audience. Wilder Penfield already is too long dead for the present generation of medical students and residents, and his Victorian philosophy is no longer in vogue. Nevertheless, those who do chance upon the book will be rewarded by finding a good volume about a good man.—R. John C. Pearson, M. B.

County Societies

HARRISON

The Harrison County Medical Society met on January 4 at the Sheraton Inn in Clarksburg.

The Society went on record as opposing the proposed physician assistants bills in the State Legislature.

The Society will conduct a continuing medical education symposium on April 1 at the Sheraton Inn.—James L. Bryant, M. D., Secretary.

* * *

McDOWELL

The McDowell County Medical Society met on February 10 at the Stevens Clinic Hospital in Welch.

Tom Spec, head of the physiotherapy department at the hospital, was the guest speaker. He discussed the levels of physiotherapy and the service that is available, and then conducted a tour of his department for Society members. — Muthusami Kuppusami, M. D., Secretary.

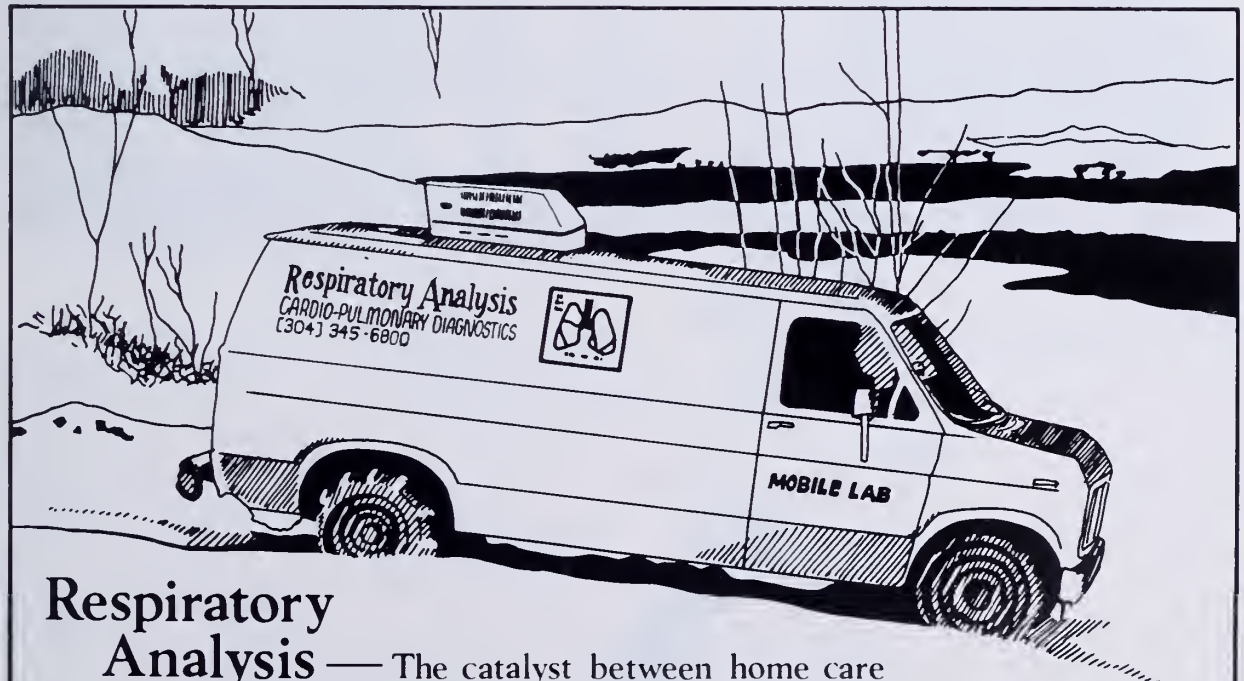
* * *

PARKERSBURG ACADEMY

Dr. Marc Pohl from the Cleveland Clinic was the guest speaker for the meeting of the Parkersburg Academy of Medicine on January 20 at the Parkersburg Country Club. His subject was "Drug Therapy of Hypertension."

Doctor Pohl reviewed mechanisms involved in the control of arterial pressure and how one might take advantage of the mechanisms involved in control of arterial pressure in selecting appropriate antihypertensive therapy.

Dr. Harry Shannon of Parkersburg, President Elect of the State Medical Association, gave a report on legislative and other activities of the Association.—Michael Morehead, M. D., Secretary-Treasurer.



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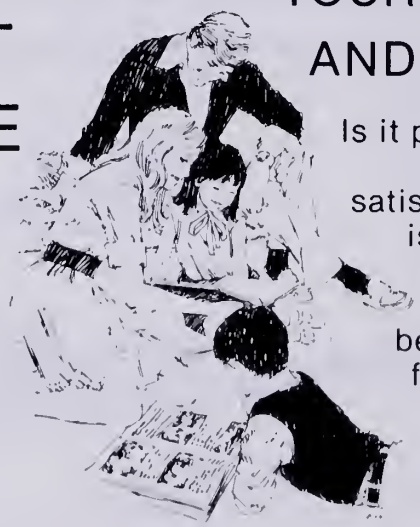

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Brooke	Rogelio L. Velarde	Follansbee	Wm. T. Booher, Jr.	Wellsburg	
Cabell	Hossein Sakhai	Huntington	Maurice A. Mufson	Huntington	2nd Thurs.
Central West Virginia	Luis A. Almase	Weston	Joseph B. Reed	Buckhannon	As Sched.
Eastern Panhandle	John S. Palkot	Martinsburg	Francisco D. Sabado	Martinsburg	2nd Wed.
Fayette	Honorato M. Aguila	Oak Hill	Amor H. Ramirez	Montgomery	1st Wed.
Greenbrier Valley	Robert K. Scott II	Ronceverte	Anthony C. Dougherty	Ronceverte	2nd Wed.
Hancock	Thomas J. Beynon	Weirton	Pedro R. Montero, Jr.	Chester	3rd Tues.
Harrison	Carlos A. Naranjo	Clarksburg	Gaspar Z. Barcinas	Bridgeport	1st Thurs.
Jefferson	S. K. G. Menon	Ranson	Vettivelu Maheswaran	Ranson...	1st Wed.
Kanawha	Wm. C. Revercomb, Jr.	Charleston	Wm. C Morgan, Jr.	Charleston	2nd Tues.
Logan	Herbert D. Stern	Logan	Tivitmahaisoon Chanchai	Logan	2nd Wed.
Marion	Stanard L. Swihart	Fairmont	Babu R. Devabhakthuni	Fairmont	Last Tues.
Marshall	Carlos C. Jimenez	Glen Dale	Jose J. Ventosa, Jr.	Glen Dale	1st Tues.
Mason	Samuel P. McNeill	Pt. Pleasant	Francis G. Fugaro	Pt. Pleasant	4th Tues.
McDowell	Richard O. Gale	Gary	M. Kuppusami	Welch	2nd Wed
Mercer	John J. Bryan	Bluefield	David F. Bell, Jr.	Bluefield	3rd Mon.
Mingo	Nikhanth Purohit	Williamson	Edward B. Headley	Delbarton	2nd Wed.
Monongalia	Wilbur Z. Sine	Morgantown	Paul J. Jakubec	Morgantown	1st Tues.
Ohio	F. Jay Keefer	Wheeling	George E. Bontos	Wheeling	4th Tues.
Parkersburg Academy	Manuel G. Magno, Jr.	Parkersburg	Michael A. Morehead	Parkersburg	1st Thurs.
Potomac Valley	Zinnia Bacol-Giron	Romney	Larry C. Rogers	Petersburg	2nd Wed.
Preston	Dennis F. Saver	Newburg	C. Y. Moser	Kingwood	4th Thurs.
Raleigh	Richard D. Richmond	Beckley	Norman Wayne Taylor	Beckley	3rd Thurs.
Summers	Chandra P. Sharma	Hinton	T. H Mirza	Hinton	3rd Mon.
Tygart's Valley	Hugh H. Cook, Jr.	Elkins	Michael M. Stump	Elkins	3rd Thurs.
Western Medical Soc. of WV	James T. Hughes	Ripley	Ali H. Morad	Ripley	Bi-Monthly
Wetzel	Donald A. Blum	New Martinsville	K. M Chengappa	New Martinsville	Monthly
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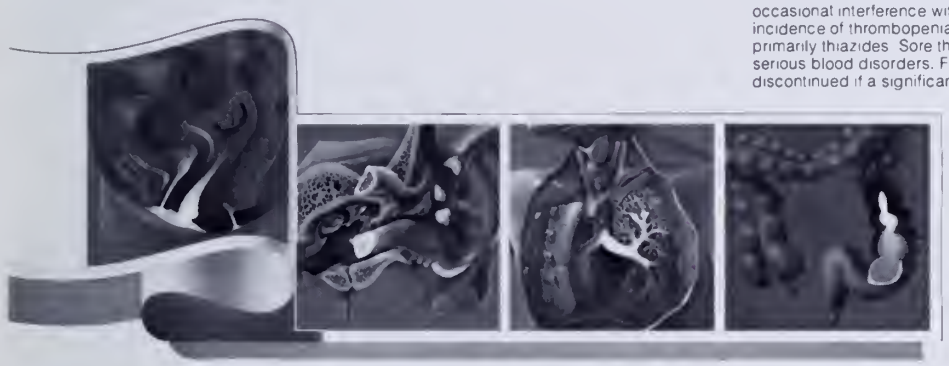

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Supplied: *Double Strength (DS) tablets*, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100; Prescription Paks of 20 and 28. *Tablets*, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40. *Pediatric Suspension*, containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); cherry-flavored—bottles of 100 ml and 16 oz (1 pint). *Suspension*, containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); fruit-licorice flavored—bottles of 16 oz (1 pint).

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1. Rubin RH, Swartz MN, N Engl J Med 303:426-432, Aug 21, 1980 2. Data on file, Medical Department, Hoffmann-La Roche Inc.

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Please see previous page for summary of product information.

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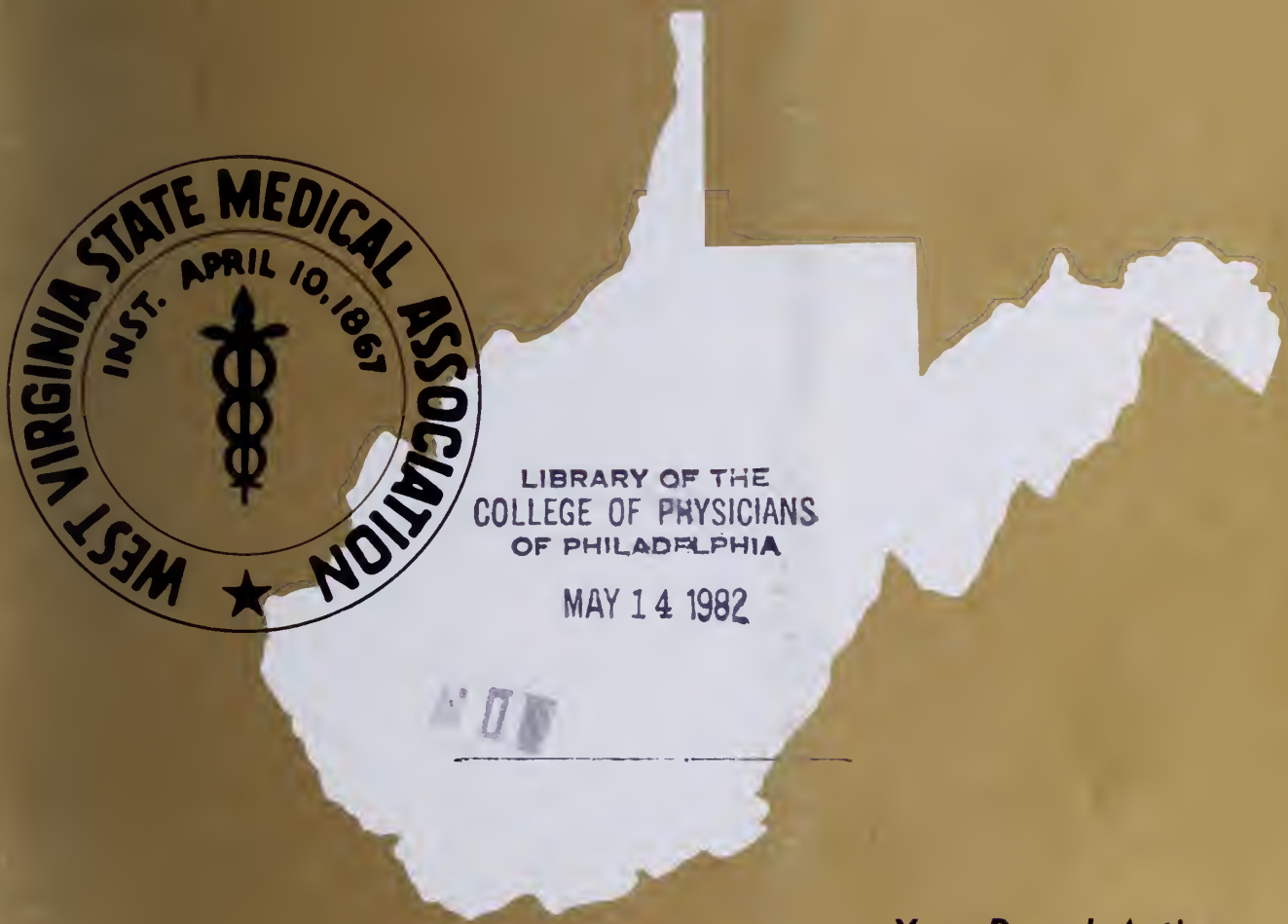

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Year-Round Action
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115th Annual Meeting, The Greenbrier
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Volume 78 Number 5
May 1982

An added complication... in the treatment of bacterial bronchitis*

Brief Summary.
Consult the package literature for prescribing information.

Indications and Usage: Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae,* and *S. pyogenes* (group A beta-hemolytic streptococci).

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Precautions: If an allergic reaction to cefaclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of cefaclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such a condition, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Usage in Pregnancy—Although no teratogenic or antifertility effects were seen in reproduction studies in mice and rats receiving up to 12 times the maximum human dose or in ferrets given three times the maximum human dose, the safety of this drug for use in human pregnancy has not been established. The benefits of the drug in pregnant women should be weighed against a possible risk to the fetus.

Usage in Infancy—Safety of this product for use in infants less than one month of age has not been established.

Adverse Reactions: Adverse effects considered related to cefaclor therapy are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70) and nausea and vomiting (1 in 90).

As with other broad-spectrum antibiotics, colitis, including rare instances of pseudomembranous colitis, has been reported in conjunction with therapy with Ceclor.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor® (cefaclor). Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic—Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200). {100281R}

Some ampicillin-resistant strains of Haemophilus influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-6]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

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cefaclor
Pulvules®, 250 and 500 mg

*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.[8]

Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

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8. Principles and Practice of Infectious Diseases (edited by G.L. Mandell, R.G. Douglas, Jr., and J.E. Bennett), p. 487. New York: John Wiley & Sons, 1979

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Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285

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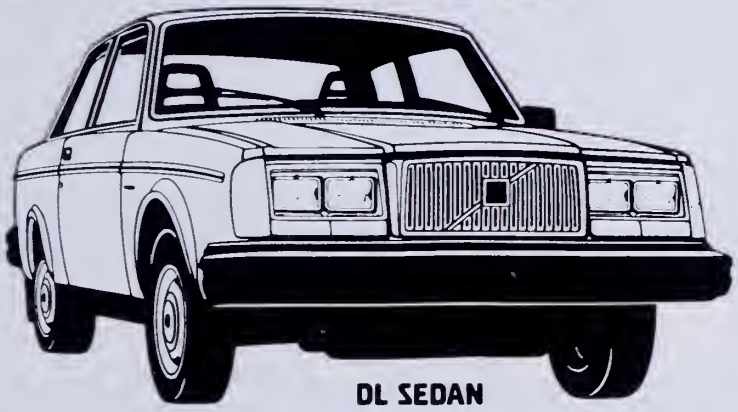

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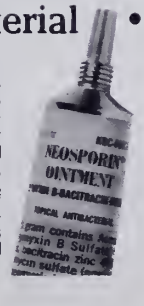

DESCRIPTION: Each gram contains: Aerosporin™ (Polymyxin B Sulfate) 5,000 units, bacitracin zinc 400 units, neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs; in tubes of 1 oz and ½ oz and 1/32 oz (approx.) foil packets.

INDICATIONS: *Therapeutically* (as an adjunct to systemic therapy when indicated), for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection. *Prophylactically*, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: Not for use in the eyes or in the external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as a failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

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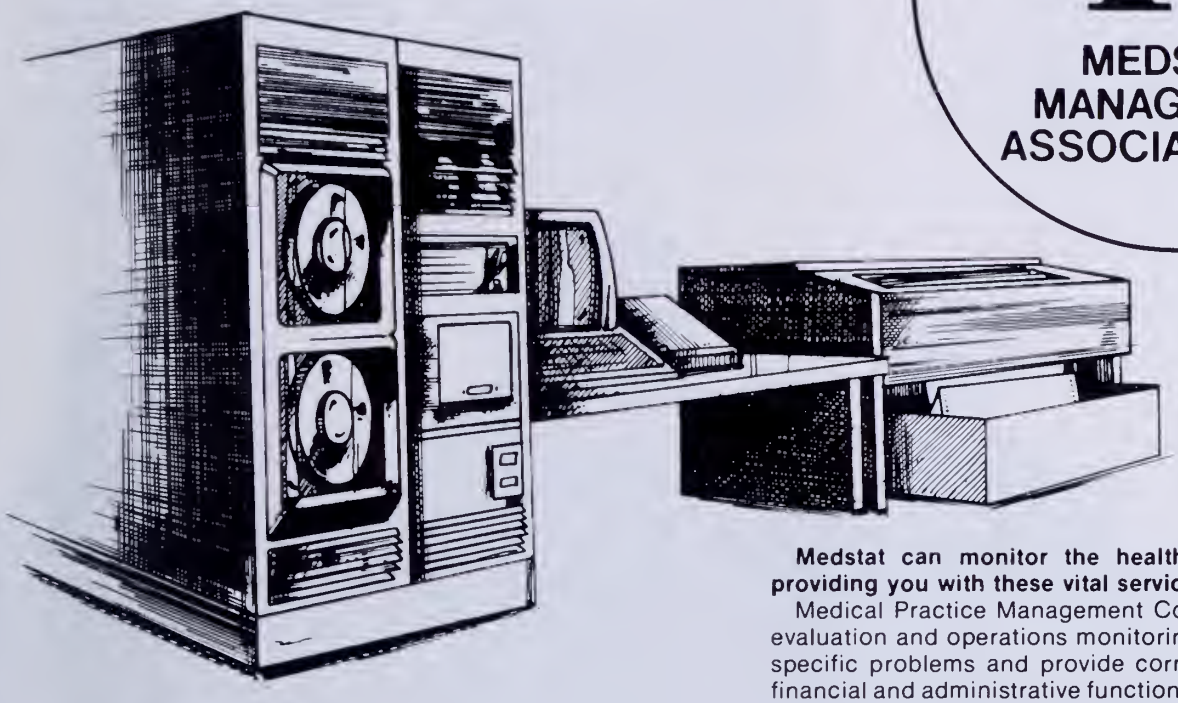

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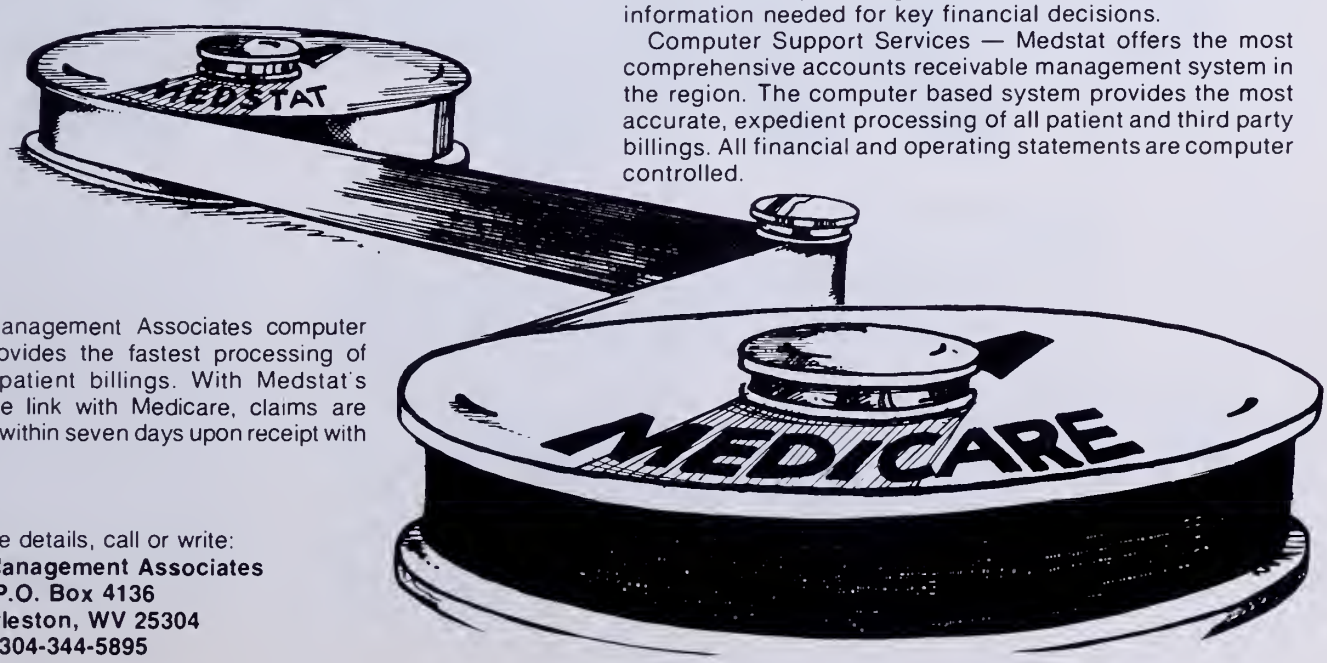

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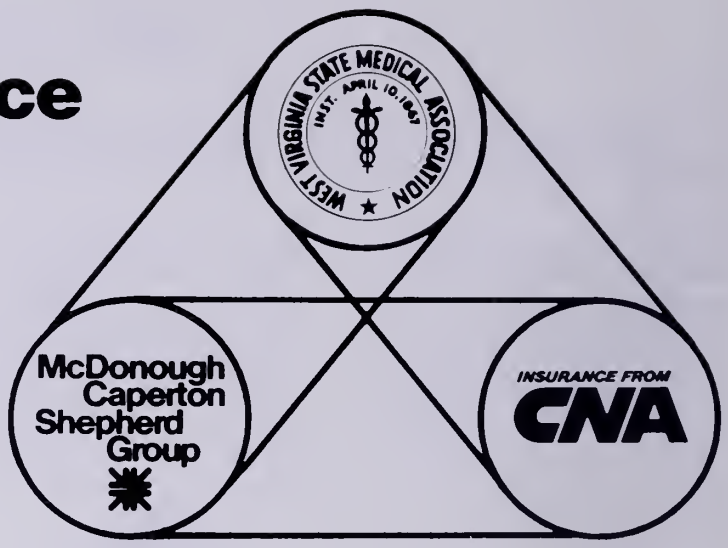

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Indications
Cyclacillin has less in vitro activity than other drugs in the ampicillin class and its use should be confined to these indications: Treatment of the following infections:

RESPIRATORY TRACT
Tonsillitis and pharyngitis caused by Group A beta-hemolytic streptococci
Bronchitis and pneumonia caused by *S. pneumoniae* (formerly *D. pneumoniae*)
Otitis media caused by *S. pneumoniae* (formerly *D. pneumoniae*), *H. influenzae*, and Group A beta-hemolytic streptococci
Acute exacerbation of chronic bronchitis caused by *H. influenzae**
*Though clinical improvement has been shown, bacteriologic cures cannot be expected in all patients with chronic respiratory disease due to *H. influenzae*.

SKIN AND SKIN STRUCTURES (integumentary) infections caused by Group A beta-hemolytic streptococci and staphylococci, nonpenicillinase producers.

URINARY TRACT INFECTIONS caused by *E. coli* and *P. mirabilis*. (This drug should not be used in any *E. coli* and *P. mirabilis* infections other than urinary tract.)

NOTE: Perform cultures and susceptibility tests initially and during treatment to monitor effectiveness of therapy and susceptibility of bacteria. Therapy may be instituted prior to results of sensitivity testing.

Contraindications Contraindicated in individuals with history of an allergic reaction to penicillins.

Warnings Cyclacillin should only be prescribed for the indications listed herein.

Cyclacillin has less in vitro activity than other drugs of the ampicillin class. However, clinical trials demonstrated it is efficacious for recommended indications.

Serious and occasional fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin. Although anaphylaxis is more frequent following parenteral use, it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with history of sensitivity to multiple allergens. There are reports of patients with history of penicillin hypersensitivity reactions who experienced severe hypersensitivity reactions when treated with a cephalosporin. Before penicillin therapy, carefully inquire about previous hypersensitivity reactions to penicillins, cephalosporins and other allergens. If allergic reaction occurs, discontinue drug and initiate appropriate therapy. Serious anaphylactoid reactions require immediate emergency treatment with epinephrine. Oxygen, I.V. steroids, airway management, including intubation, should also be administered as indicated.

Precautions Prolonged use of antibiotics may promote overgrowth of nonsusceptible organisms. If superinfection occurs, take appropriate measures.

PREGNANCY: Pregnancy Category B. Reproduction studies performed in mice and rats at doses up to 10 times the human dose revealed no evidence of impaired fertility or harm to the fetus due to cyclacillin. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, use this drug during pregnancy only if clearly needed.

NURSING MOTHERS: It is not known whether this drug is excreted in human milk. Because many drugs are, exercise caution when cyclacillin is given to a nursing woman.

Adverse Reactions Oral cyclacillin is generally well tolerated. As with other penicillins, untoward sensitivity reactions are likely, particularly in those who previously demonstrated penicillin hypersensitivity or with history of allergy, asthma, hay fever, or urticaria. Adverse reactions reported with cyclacillin: diarrhea (in approximately 1 out of 20 patients treated), nausea and vomiting (in approximately 1 in 50), and skin rash (in approximately 1 in 60). Isolated instances of headache, dizziness, abdominal pain, vaginitis, and urticaria have been reported. (See WARNINGS) Other less frequent adverse reactions which may occur and are reported with other penicillins are anemia, thrombocytopenia, thrombocytopenic purpura, leukopenia, neutropenia and eosinophilia. These reactions are usually reversible on discontinuation of therapy.

As with other semisynthetic penicillins, SGOT elevations have been reported.

As with antibiotic therapy generally, continue treatment at least 48 to 72 hours after patient becomes asymptomatic or until bacterial eradication is evidenced. In Group A beta-hemolytic streptococcal infections, at least 10 days' treatment is recommended to guard against risk of rheumatic fever or glomerulonephritis. In chronic urinary tract infection, frequent bacteriologic and clinical appraisal is necessary during therapy and possibly for several months after. Persistent infection may require treatment for several weeks.

Cyclacillin is not indicated in children under 2 months of age.

Patients with Renal Failure Cyclacillin may be safely administered to patients with reduced renal function. Due to prolonged serum half-life, patients with various degrees of renal impairment may require change in dosage level (see DOSAGE AND ADMINISTRATION in package insert).

Dosage (Give in equally spaced doses)

INFECTION	ADULTS	CHILDREN*
Respiratory Tract		
Tonsillitis & Pharyngitis	250 mg q.i.d.	body weight < 20 kg (44 lbs) 125 mg t.i.d.
		body weight > 20 kg (44 lbs) 250 mg t.i.d.
Bronchitis and Pneumonia		
Mild or Moderate Infections	250 mg q.i.d.	50 mg/kg/day q.i.d.
Chronic Infections	500 mg q.i.d.	100 mg/kg/day q.i.d.
Otitis Media	250 mg to 500 mg q.i.d.†	50 to 100 mg/kg/day t.i.d.
Skin & Skin Structures	250 mg to 500 mg q.i.d.†	50 to 100 mg/kg/day
Urinary Tract	500 mg q.i.d.	100 mg/kg/day

*Dosage should not result in a dose higher than that for adults.
†depending on severity

How Supplied Tablets 250 mg and 500 mg in bottles of 100. Oral Suspension 125 mg and 250 mg per 5 ml in bottles to make 100 ml and 200 ml of Suspension.

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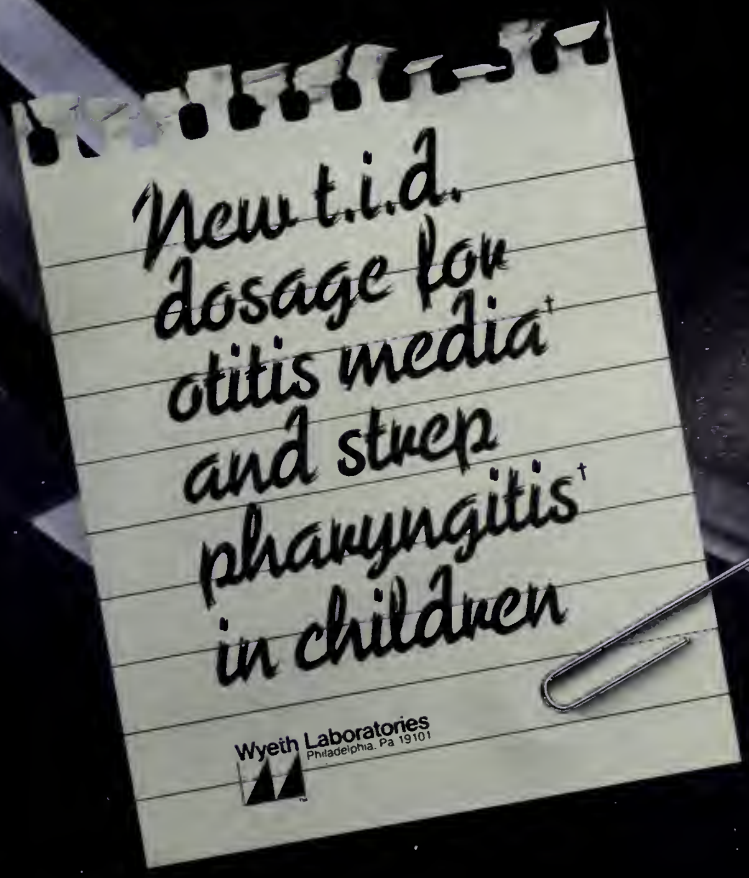

*Rapidly excreted unchanged in urine. Clinical efficacy may not always correlate with blood levels.
†Due to susceptible organisms.
1. Ginsburg CM, McCracken GH Jr, Zweighaft TC, Clahsen JC: Comparative pharmacokinetics of cyclacillin and amoxicillin in infants and children. *Antimicrob Ag Chemother* 19:1086-1088 (June) 1981.
2. Multicenter trials. Data to be published.
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See important information on adjoining column.

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ONE FOR ALL

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A single tablet eradicates pinworm in 95% of patients.

*Contraindicated in pregnant women and in persons who have shown hypersensitivity to the drug.

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(mebendazole)

JANSSEN PHARMACEUTICA

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Please see complete Prescribing Information on adjacent page.

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Vermox
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Sig 1 tab
each family
member

DESCRIPTION VERMOX (mebendazole) is methyl 5-benzoylbenzimidazole-2-carbamate.

ACTIONS VERMOX exerts its anthelmintic effect by blocking glucose uptake by the susceptible helminths, thereby depleting the energy level until it becomes inadequate for survival. In man, approximately 2% of administered mebendazole is excreted in urine as unchanged drug or a primary metabolite. Following administration of 100 mg of mebendazole twice daily for three consecutive days, plasma levels of mebendazole and its primary metabolite, the 2-amine, never exceeded 0.03 μg/ml and 0.09 μg/ml, respectively.

INDICATIONS VERMOX is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (common roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections. Efficacy varies as a function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains. Efficacy rates derived from various studies are shown in the table below:

	Whipworm	Common Roundworm	Hookworm	Pinworm
cure rates				
mean	68%	98%	96%	95%
(range)	(61-75%)	(91-100%)	–	(90-100%)
egg reduction				
mean	93%	99.7%	99.9%	–
(range)	(70-99%)	(99.5%-100%)	–	–

CONTRAINDICATIONS VERMOX is contraindicated in pregnant women (see Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

PRECAUTIONS *PREGNANCY:* VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.

PEDIATRIC USE: The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

ADVERSE REACTIONS Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

DOSAGE AND ADMINISTRATION The same dosage schedule applies to children and adults. The tablet may be chewed, swallowed or crushed and mixed with food. For the control of pinworm (enterobiasis), a single tablet is administered orally, one time. For the control of common roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days. If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.

HOW SUPPLIED VERMOX is available as chewable tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets.
VERMOX (mebendazole) is an original product of Janssen Pharmaceutica, Belgium.

US Patent 3,657,267
December 1979

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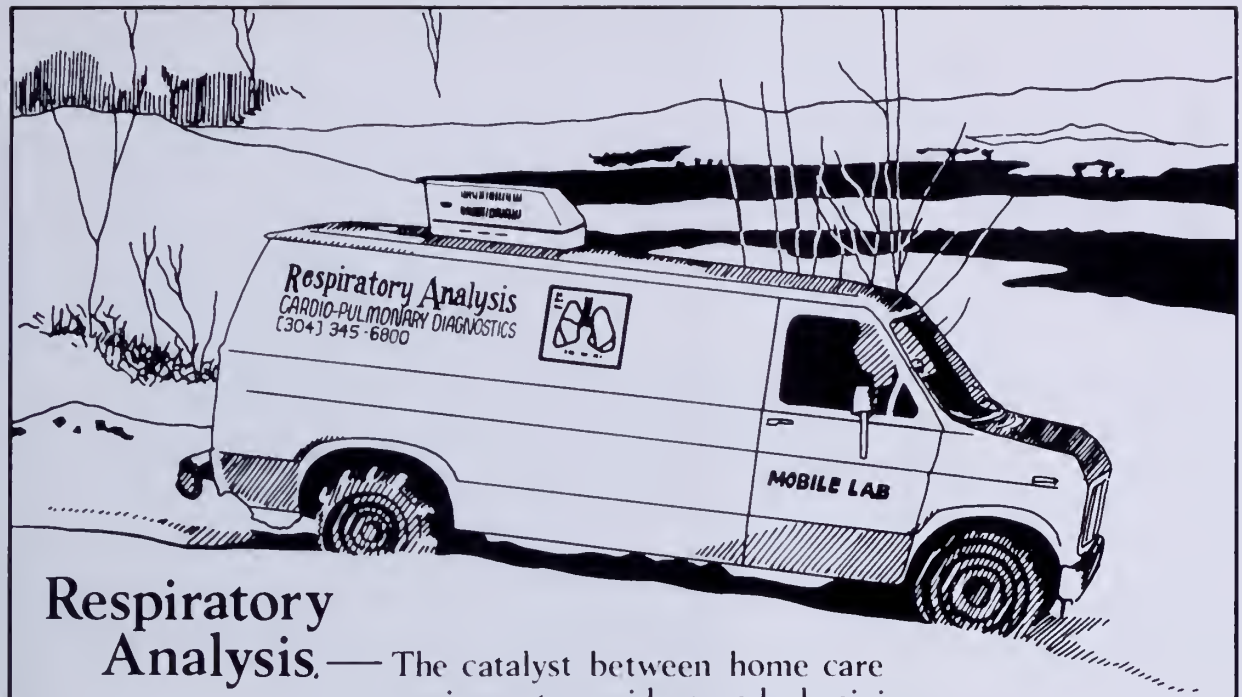

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At times like this, Valium (diazepam/Roche) can be a potent therapeutic ally. It works promptly. Within just a few hours, the patient begins to feel calmer. And in a few days, anxiety relief not only becomes more pronounced but a noticeable reduction in anxiety-generated somatic symptoms also occurs.

Equally important, Valium is generally well tolerated. Side reactions more serious than drowsiness, ataxia and fatigue are rare. Patients should, of course, be cautioned against driving or drinking alcohol while on Valium therapy. Periodic reassessment of the need for antianxiety medication should also be performed.

VALIUM® (IV)

diazepam/Roche

2-mg, 5-mg, 10-mg scored tablets

BECAUSE YOU'RE CONVINCED THE PATIENT NEEDS IT

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Please see summary of product information on the following page.

VALIUM®(diazepam/Roche)

Before prescribing, please consult complete product information, a summary of which follows:
Indications: Management of anxiety disorders, or short-term relief of symptoms of anxiety. Anxiety or tension associated with the stress of everyday life usually does not require treatment with an anxiolytic. Symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome; convulsive disorders (not for sole therapy).
The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.
Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma, may be used in patients with open angle glaucoma who are receiving appropriate therapy.
Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication, abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed, drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation. The clearance of Valium and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.
Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.
Dosage: Individualize for maximum beneficial effect. *Adults:* Anxiety disorders, symptoms of anxiety, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed, adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d., adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).
How Supplied: For oral administration, Valium scored tablets—2 mg, white; 5 mg, yellow; 10 mg, blue—bottles of 100* and 500,* Prescription Paks of 50, available in trays of 10.* Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25,† and in boxes containing 10 strips of 10.†

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The West Virginia Medical Journal

Vol. 78, No. 5 May, 1982

Prolonged EEG Recording With Unrestricted Patient Mobility

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JUANITA T. STONE, R. N., CMET
Department of Neurology, The Wheeling Clinic, Wheeling, West Virginia

A method of ambulatory EEG recording is presented and the equipment described. Three brief case histories are presented, and significant EEG tracings are illustrated. Diagnostic advantages are discussed.

The recording time for a standard electroencephalogram (EEG) is approximately 30 minutes. The patient lies quietly in a darkened room, interrupted only by such activating procedures as hyperventilation and photic stimulation. In some cases of epilepsy, it is helpful to record brain wave activity over a much longer period of time and under conditions of everyday life outside the hospital. Prolonged EEG monitoring, employing a 24-hour miniaturized and wearable cassette recorder, satisfies both time and activity requirements. It records through the circadian biorhythms and during the daily activities and experiences which often precipitate paroxysmal abnormal discharges. EEG monitoring, under these conditions, is useful in distinguishing hysterical fits from true seizures,[1] in identifying behavioral ictal equivalents, and in determining which hard-to-describe "spells" are cerebral in origin.

Pseudoseizure is a term usually reserved for a psychogenic attack occurring in a known epileptic. It often is substituted for the actual seizure, and may increase in frequency as better seizure control is achieved with medication. In this vexing therapeutic dilemma, the 24-hour monitor is most helpful in validating adequate seizure control, thus indicating the need for some approach other than increasing drug dosage to unnecessary levels.

It is used to measure the freqency and time distribution of absence attacks[2,3,4] and to determine which conditions, activities or stages of sleep may increase their incidence.[5] This information aids the clinician in proper drug selection and dosage.[6]

Method and Equipment

The equipment is manufactured by Oxford Medical Systems (Medilog 4-24). It includes preamplifiers, recorder, display screen and filter coupling unit. The patient wears a small but sturdy battery-operated, lightweight (0.5 Kg.) recorder with head-mounted preamplifiers, indifferent leads, and T/E button allowing high-quality EEG and other physiological data to be obtained from patients engaged in unrestricted activity. Basic techniques used in the procedure include patient preparation, EEG recorder preparation, and pretesting and processing of the 24-hour tapes. Processing involves printing out abnormalities and other selected tape areas through our Grass EEG machines.

Collodion-applied silver/silver chloride disc electrodes, using the International 10/20 system of placement, properly applied and filled with a conductive electrolytic gel, give a low and equal impedance reading of less than five Kilohms.

Preamplifiers are secured to the scalp with gauze squares dipped in collodion, dried with an air pump and positioned to achieve desired electrode polarity.

For pretesting and processing, a filter-coupling unit is employed to connect the recorder to the

EEG machine. During the pretest, eye blinks, chewing, hyperventilation, head movements, etc., are monitored as hard copy through the EEG machine and stored on the precalibrated cassette tape.[7] Having been informed as to the importance of making notations in the diary, use of the event or seizure signal and keeping the equipment dry, the patient is sent home with instructions to return the following day.

Three channels of EEG signals are recorded on the miniature analog tape recorder while one channel is assigned to a crystal-controlled digital time code and patient-operated event mark signal, permitting correlation of patient symptoms to time of day. After 24 hours of continuous recording, the patient reports back to the EEG laboratory where the electrodes and preamplifiers are removed with acetone and the cassette returned. The portable cassette then can be placed in the replay deck and monitored visually at the desired speed on the page mode display (PMD) screen. The PMD replay and visual components of the system are designed for rapid visual scanning of EEG and other physiological data.[8] An audio amplifier included in the replay unit enables both the "event" beep and any signal recovered from the tape within a specific range to be heard,[9] thus allowing audible recognition of spike and wave bursts and seizure signals.[10] Using the filter coupling unit to the EEG machine, hard copy of important segments can be made for the patient's chart.

Case Reports

Case One. A 28-year-old single woman presented with mild intellectual deficit and history of convulsive disorder since age five years. For the past seven years, there had been a personality change characterized by recurrent and unprovoked episodes of violent behavior toward her mother and/or father. At times, these had resulted in significant injuries to one or both parents as well as considerable household property damage. She had been admitted to the Psychiatric Department on numerous occasions for this reason. In the presence of others, she had been able to control her behavior and, after admission to the hospital, her conduct became exemplary. Standard EEGs showed paroxysmal activity with abnormalities being more marked in the right temporal area. CT head scan was normal.

Question: Were episodes of "rage," directed only to parents and voluntarily controlled in the presence of others, behavioral seizure equivalents (Figure 1)?

Case Two. A 48-year-old married man was admitted to the Psychiatric Department following sudden onset of violent behavior. He had attempted to strangle his wife and one of his children. Immediately prior to this, he had experienced unpleasant gustatory and olfactory hallucinations. For 24 hours following admission, he was somewhat euphoric, and expressed bizarre religious ideas.

Twelve years ago (following sudden onset of religious delusions and regressive behavior) he was treated for a schizophrenic disorder. Thirteen years ago, he was hospitalized after a sudden onset of violent behavior associated with grandiose delusions of religious nature. Although not mentioned in medical records from hospitals where he was admitted for these previous episodes, he believes they were preceded by olfactory aurae. Two electroencephalograms were normal.

Problem: Justification for instituting anticonvulsant program for possible temporal lobe

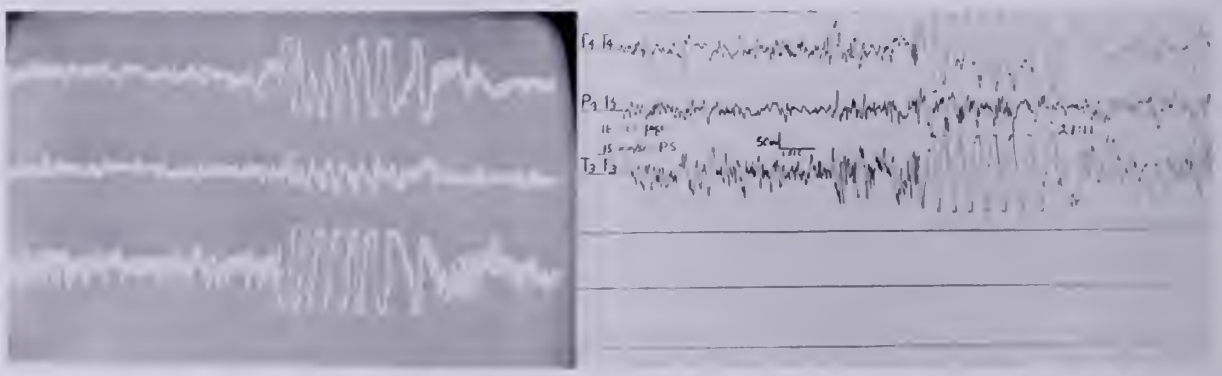

Figure 1 (page mode display screen, left; EEG machine print-out, right). Generalized burst of high-voltage spike and wave complex. Similar discharges occurred numerous times between 9:10 P.M. and 9:30 P.M., correlating with patient's diary: "very nervous, blurred vision, continuous blackouts;" "I'm getting mad at mother;" pushing the T/E button several times. Following this 20-minute period of symptoms and abnormal brain wave activity, she became combative with parents.

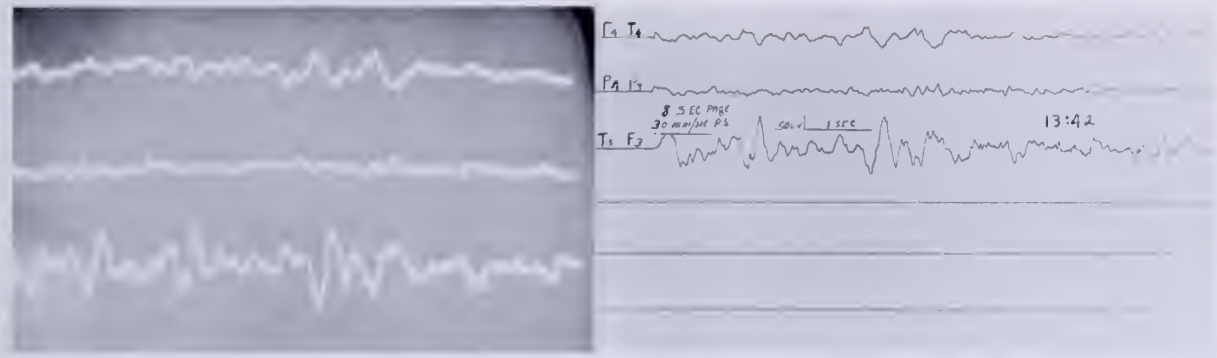

Figure 2 (page mode display screen, left; EEG machine print-out, right). During an afternoon nap, runs of higher voltage slow activity in the front-temporal regions, somewhat asymmetrical, more marked on the left.

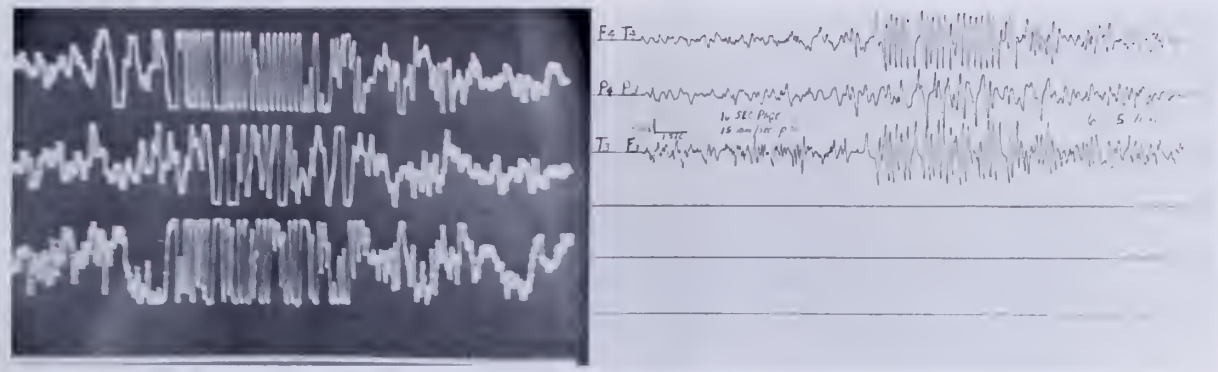

Figure 3 (page mode display screen, left; EEG machine print-out, right). One of several bursts of high-voltage, sharp and slow activity which occurred during early morning sleep.

epilepsy with widely spaced attacks and absence of EEG abnormalities (Figure 2).

Case Three. An eight-year-old male presented with a history of sporadic inattention in school. At times he stares and appears to be daydreaming. Developmental history was normal. He is intelligent and a good student. Neurological examination was negative. EEG was normal. He is taking no medication.

Question: Daydreaming or seizure activity (Figure 3)?

Discussion

Other long-term EEG recording systems allow some degree of patient mobility; however, both cable[6,11,12] and radio-telemetered[6] EEG usage is restricted to the hospital area because of limitations set by cable length or strength of radio transmitting signal. These techniques offer more channels and the option of simultaneous electrocerebral and video recording.[11] They do require monitoring by personnel and all-day use of an EEG machine for each patient. For most clinical purposes they are neither practical nor cost effective. They are admirably suited for teaching, research and some clinical problems involving localization or determination of seizure type.

The EEG Cassette Recording System requires no monitoring by personnel, occupies an EEG machine a short time only for hard copy production, and permits unlimited patient mobility. It collects and stores data while the patient is away from the hospital. The number of portable recorders available in the laboratory dictates the number of patients who can be monitored on the same day. The common advantage of all prolonged EEG monitoring systems is the capacity to demonstrate and quantify episodic phenomena.

The 24-hour cassette recorder provides a continuous EEG record during everyday diurnal activities and the various stages of sleep. It is a useful extension of the electroencephalogram which enhances our ability to diagnose and treat epilepsy. It is particularly valuable in distinguishing pseudoseizures from true ictal events, in determining whether "dizzy" spells or behavioral abnormalities are epileptic, and in measuring the incidence of absence attacks. The procedure is quite acceptable to patients.

Acknowledgements

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Metrizamide Myelography

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Myelography with water-soluble metrizamide is a new technique in diagnostic radiology. Advantages, technique, indications, contraindications and side effects are discussed. Specific details of pre- and post-myelogram management of the patients are included.

For many years, positive contrast myelography was performed mainly by oily contrast agents such as Pantopaque (ethyliodophenylundecuilate), which was introduced in 1940. Metrizamide has been used for several years in Scandinavia with good results.[1]

It was not until August, 1978, that metrizamide was approved by the Food and Drug Administration for myelography in the United States.

Metrizamide (Amipaque) is a stable chemical combination of a contrast medium (metrizoic acid), a sugar and an amide (glucosamine) which creates a compound that is water-soluble and will not ionize in aqueous solutions.[2]

There are several advantages of using a water-soluble contrast agent rather than an oil-base agent: (1) the nerve roots and nerve root sleeves are better visualized; (2) contrast material does not have to be withdrawn after the study; (3) no residue remains in the spinal canal 24 hours after the examination; (4) a smaller needle may be used for lumbar puncture;[1] (5) the needle is removed after the injection without having to reaspirate; and (6) the lower density of water-soluble contrast makes CT scanning possible.

Clinical Manifestations

Unlike an oily contrast agent which remains unabsorbed for a long time in the dural sac, metrizamide is readily absorbed. Following spinal subarachnoid injection of metrizamide, conventional radiography will continue to provide diagnostic contrast for approximately an hour. At four to five hours, contrast is hazy; none is detectable at 24 hours.

Metrizamide is absorbed from cerebrospinal fluid into the blood stream. Approximately 60 per cent of the administered dose is excreted unchanged through the kidneys within 48 hours.[3,4,5,6] The smaller needle produces a smaller hole in the dural sac with less leakage of cerebrospinal fluid which can accentuate the headache and may cause meningismus.[7] A further advantage of a non-ionic compound such as metrizamide is the decreased likelihood of arachnoiditis.[1,8]

Metrizamide is indicated for lumbar, thoracic, cervical and total columnar myelography, and for use in computerized tomography of the intracranial subarachnoid spaces following spinal subarachnoid injection.[3,9,10,11,13,14,15]

One problem encountered with this agent has been inadequate cervical and thoracic visualization using a lumbar puncture because metrizamide dilutes to a point of insufficient radiopacity for good radiographs. For this reason, punctures at the C_1-C_2 interspace have been used with good success when a cervical problem was indicated.[1]

Contraindications

Phenothiazine derivatives such as chlorpromazine are contraindicated before or after metrizamide myelography. Experiments conducted on rabbits confirmed that neuroleptic drugs potentiate the weak epileptogenic action of metrizamide. Chlorpromazine withdrawal for a period of 48 hours suppresses this potentiating effect in the rabbit.

In a patient under long-term treatment, neuroleptics should be discontinued at least 48 hours before an examination with metrizamide.[16]

No teratogenic effects attributable to metrizamide have been observed in reproduction studies in animals. However, before doing any myelogram on a pregnant woman, the benefit to the patient should be weighed carefully against the possible risk of drugs and radiation to the fetus.

Metrizamide myelography is not recommended for children under 12 years of age. However, metrizamide is reported to be useful in the diagnosis of abnormalities of the spinal cord, nerve roots and dura in infancy and childhood in the same manner that has proved useful in adults.[17,18,19]

To prevent vomiting during or after the myelography, it is recommended that no solid food be given for six to eight hours before the

examination. The patient should be well hydrated. Fluids should be forced to raise the plasma volume and to help replace cerebrospinal fluid leakage.

Before the examination, the patient should be questioned for a history of allergy. Although a history of allergy or asthma may imply greater than usual risk of hypersensitivity, it does not contraindicate the use of metrizamide. Premedication with antihistamines to avoid or mininimize potential allergic reactions may be considered. Sedatives or minor tranquilizers seldom are needed, but may be used at the discretion of the physician.[3]

Technique

Proper skin preparation and draping of the patient for lumbar puncture should be carried out. Local anesthesia is unnecessary, although it may be helpful for some patients.[3] A narrow-gauge needle (22) is used for puncture.[3,7] Lumbar puncture is usually made at the L_3 - L_4 interspace. After removal of a few milliliters of cerebrospinal fluid, 10 to 15 ml of an isotonic concentration of (170 mg/ml) metrizamide is injected slowly for lumbar myelography. (Higher concentrations are used for thoracic and cervical myelography.)

With proper technique during fluoroscopy, adequate and consistent visualization of the cervical and thoracic canal is possible using metrizamide via lumbar puncture without special equipment or technique.[1] This may be achieved by using a slow rate of injection of contrast material, by minimizing turbulence, and by mixing the contrast agent with spinal fluid.[1]

Gentle tilting of the patient lying in the lateral decubitus position probably is the best method of running the contrast medium from the lumbar to the thoracic or cervical regions. This avoids running the medium over the lumbar lordosis and thoracic kyphosis.[7] Rapid, jerky movements of the patient, either spontaneously or by design, cause rapid admixture and dilution of the contrast medium, and should be avoided.[7] Following the examination, the table is tilted 30 degrees head up for two minutes to displace metrizamide to lumbar region.

The patient should remain semi-recumbent with the head elevated 15 to 30 degrees for six hours.[3] This contrasts with a Pantopaque myelogram where the patient lies flat for 24 hours. The patient also should be encouraged to drink a large volume of fluids. No solid food should be given for eight hours.

Complications

The most common reactions to metrizamide are severe headache, nausea and vomiting. These reactions occur three to eight hours post-injection, and almost all disappear within 24 hours.[3,20,21] Backache, neck stiffness, numbness and paresthesia, and leg or sciatic-type pain occur less frequently.[3,21] Fever and dizziness also have been reported.[14] Epileptic seizures may occur rarely after cervical myelography with aqueous contrast media. The incidence of post-investigation (metrizamide) grand mal seizures varies from 0.1 to one per cent in different reports.[7,21] Should a seizure occur, intravenous diazepam or sodium phenobarbital is recommended.[3]

Transient alteration in vital signs may occur.[14,22] Other rare reactions include: allergy or idiosyncrasy; chill, pruritis, urticaria, nasal congestion and dyspnea;[12,21,23] central nervous system reactions of mild and transitory perceptual aberration or hallucination, mental confusion,[12,24,25] EEG changes, disorientation and amnesia (may rarely occur);[3,24] and cardiovascular presentations of chest pain, tachycardia, bradycardia, and arrhythmia (rarely reported). Following intravenous injection of metrizamide in a small number of human volunteers, there were no significant symptoms or complications.[26] A very uncommon side effect is diarrhea.

Conclusion

Metrizamide is a new, nonionic, water-soluble contrast agent which has several advantages over oily medicine (iophendylate).

The principal disadvantage of metrizamide is that patients often experience headache, nausea and vomiting; however, these rarely persist beyond 24 hours.

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Trapshooter's Cramp

To the growing list of muscular maladies, such as writer's cramp, telegrapher's hand, and scrivener's palsy, comes a heretofore undescribed disorder peculiar to trapshooters—an inability to pull the trigger that fires the shotgun.

So writes Ernest T. Ajax, M. D., of the Veterans Administration Medical Center in Salt Lake City, Utah, who has observed the disorder in fellow participants in the sport.

In a letter to the editor in a recent issue of the *Archives of Neurology,* Doctor Ajax describes trapshooter's cramp as the inability to perform a specific muscular movement, namely, pulling a trigger. A competitor, after years of having no problem firing his shotgun, finds that his index or trigger finger refuses to move or is seized with a cramp.

No one yet knows what causes trapshooter's cramp or, for that matter, any of the other similar afflictions, but they tend to emerge only after years of practiced activity.

Primary Adenocarcinoma Of The Appendix (Case Report)

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PRIMARY carcinoma of the appendix is a very rare disease. In reviewing the literature, fewer than 200 cases have been reported.[1,5] The incidence of this condition is reported present in from 0.3 to 0.8 per cent of the removed appendices.[2,3] It primarily is a disease of the older age group with a maximum incidence in the sixth decade.[4]

McDonald and Uihlein, in reviewing the literature, found that the diseases of the appendix fall into three groups, namely, carcinoid, 96 per cent; mucinous cystadenocarcinomas, 8.5 per cent; and adenocarcinoma of the colon type, 1.5 per cent. All were found in histopathological examination of removed specimens.[5]

The first reported case of adenocarcinoma of the appendix ever made was by Burger in 1882[6] and, since that time, a few cases have appeared each year.

The following is an additional report of a case of adenocarcinoma of the colonic type. The patient was a 68-year-old male seen in December, 1979, complaining of cramping in the abdomen of about 10 days' duration and associated with daily diarrhea, nausea, but no vomiting, and loss of appetite. There was slight blood streaking in stool with the diarrhea.

Laryngectomy Revealed

The past medical history revealed that the patient had total laryngectomy some 10 years ago for carcinoma of the larynx, was under treatment for hypertension with Dyazide, and had had a left inguinal hernia repair some four years previously.

The physical examination revealed a thin, white male who appeared somewhat dehydrated. The blood pressure was 160/90, pulse 82, respiration 24 and temperature 98.6°F. There was a permanent tracheostomy, and heart and lungs were normal. The abdomen revealed moderate gaseous distension. No masses or tenderness were noted. There was a healed left inguinal incision. The rectal examination was negative, and the guaiac test for occult blood was negative.

On admission, the laboratory workup revealed a hemoglobin of 13.5 gms.; hematocrit, 42; WBCs, 5,490; and RBC, 4,540,000. The differential showed 13 per cent bands, 72 per cent segs., four per cent lymphocytes, and 11 per cent monocytes. The sedimentation rate was 46, and the urinalysis was normal as was the blood chemistry profile.

An upright film of the abdomen showed gaseous distension with a few fluid levels in the small bowel, but with gaseous distension extending into the ascending and transverse colon. Diagnosis was questionable early intestinal obstruction.

The patient was treated by intravenous fluids with nothing by mouth. The gaseous distension subsided and a barium enema was performed. This revealed a constriction of the right ascending colon above the cecum, suggesting a questionable tumor in this area. The emptying was good, and the mucosal pattern appeared normal. There was a suggestion of probable tumor of the right colon.

Appendectomy Performed

In January, 1980, an upper G.I. series was done with small bowel study which revealed the small bowel to be normal, but there still remained a questionable mass in the ascending right colon.

The bowel then was prepared with Fleets Pyrophosphates and Neomycin, and patient also was given two gms. of Mandol at 7 A.M. on the day of operation. The patient was explored, with the resulting diagnosis of probable carcinoma of the right colon. The operative findings, when explored through a right rectus incision, revealed no abnormality of the ascending colon or cecum, and no masses could be felt. The appendix was subacutely and acutely inflamed, fixed to the mesentery of the terminal ileum. By sharp dissection, this was freed and a routine appendectomy with invagination of the appendiceal stump carried out. The area of adhesions in the mesentery and terminal ileum were peritonealized with sutures of 000-chromic catgut. The postoperative clinical diagnosis was acute and subacute appendicitis.

It was with chagrin that I read the pathological report as follows: "The gross specimen consisted of an appendix measuring approximately 7.5 x 1.5 x 1.2 cm. The serosal surface was reddish

black and, on sectioning, the cut surface revealed the lumen containing yellowing tan mucoid material and congestion in the wall of the appendix.

"On sectioning the appendix, a markedly dilated lumen containing collections of polymorphonuclear cells, bacteria and mucoid material was found. The mucosa showed the usual type of glands with marked compression and abscess in some areas.

Congestion, Compression

"The appendiceal wall showed congestion, compression, and infiltration by inflammatory elements. The serosa and subserosa revealed edema and inflammatory cells of acute and chronic type. Some areas resembled small abscess formation. Newly-formed fibroblasts and stroma were also present. One of the sections showed a lumen lined with mucosa similar to that already described with a parallel sinus formation lined by colonic mucosa with an area containing collections of small sized glands placed back to back and clusters within a polypoid area with similar glands extending into the remaining intestinal wall . . ."

Diagnosis: Vermiform appendix showing a well-differentiated adenocarcinoma with mucocele, acute appendicitis, periappendicitis, and abscess in wall of appendix (Figure).

The patient was informed of the diagnosis. His convalescence was uneventful, and he was discharged, to return in about two weeks for further surgery.

On readmission, the bowel again was prepared with saturated solution of Fleets Pyrophosphate, Kennamycin and Tetracycline. He again was given Mandol, gms. II at 7 A.M. the day of surgery.

Three days later, a routine right hemicolectomy with excision of the terminal ileum which had been involved in the previous operation was carried out. The patient was given antibiotics of Mandol, gms. II for 48 hours postoperatively.

The pathology report revealed the specimen to consist of cecum, ascending colon and terminal ileum measuring 34 cm. in length and 1.8 cm. in diameter. The ascending colon measured 17 cm. in length and 6.5 cm. in diameter at level of ceum, and five cm. in diameter above the cecal level. The appendix had been removed. There were fibrous adhesions present and adjacent to the junction of the cecum and ileum where a rubbery area was present measuring 1.3 x 0.8 cm. Sections were taken for study. The mesentery was searched and 10 lymph nodes removed for study. On opening the entire specimen there were no remarkable changes. Sections were taken from the line of resection.

Section Results

The microscopic sections revealed bits of fatty tissue containing collections of inflammation cells of the chronic type predominantly macrophages. Multinucleated giant cells of foreign body type adjacent to foreign body material representing suture material were observed. Granulation tissue formation was observed in multiple areas.

Sections of multiple lymph nodes in the attached mesenterium and portion of mesocolon show fatty replacement with well-preserved lymphoid follicles, congested sinusoids, and capillaries with no evidence of metastatic tumor. The lines of resection were clear of tumor. The distal ileum and colon show areas of chronic

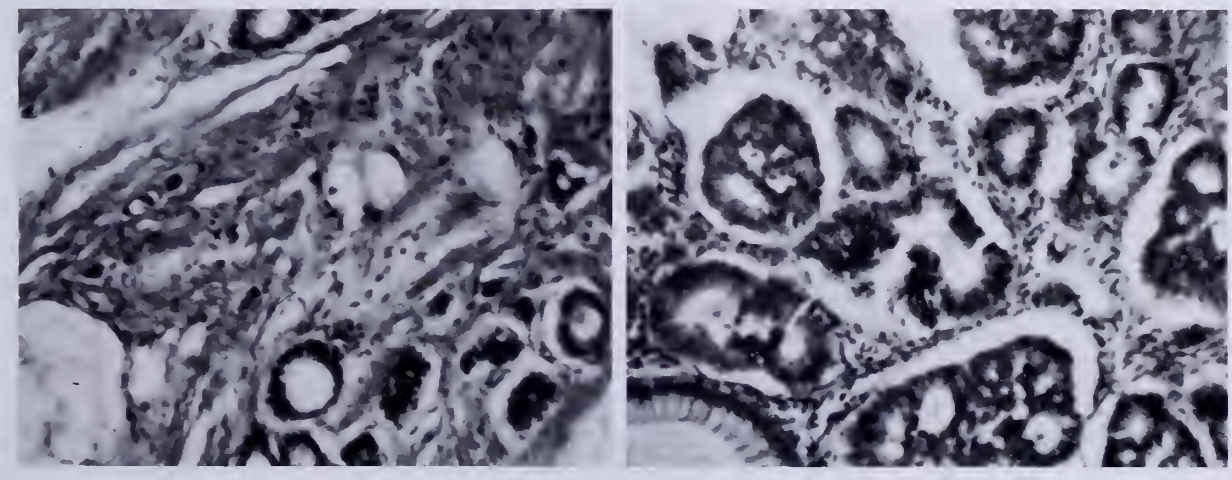

Figure. Photomicrographs showing adenocarcinoma of the appendix.

granulomatous inflammation and granulation tissue, but were free of tumor.

Impression: Negative for residual adenocarcinoma; no evidence of metasasis in accompanying lymph nodes.

The patient was discharged on the ninth postoperative day. He has been followed at three-month intervals without evidence of recurrence since that time.

Discussion

There is no symptom complex or physical findings specific for this condition, and the diagnosis is rarely, if ever, made preoperatively, More than half the cases have a diagnosis of acute appendicitis. The luminal obstruction of this tumor, ulceration, or perforation may initiate this process.

Males have a 3:1 ratio of adenocarcinoma of the appendix as compared to females. These tumors are highly malignant and tend to metastasize. The tumor tends to spread by lymphatics, blood stream and local extension.

In review of cases reported in 1973, excluding those with initial metastasis, appendectomy alone gave a 20-per cent five-year survival whereas right hemicolectomy gave a 45-per cent survival. Perforation of the tumor did not seem to affect the survival rate.[8]

Summary

In conclusion, adenocarcinoma of the appendix is a rare disease not diagnosed preoperatively, and best treated by right hemicolectomy. The above is another case to add to the literature.

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A message from . . .

The President

YEAR-ROUND ACTION

THE West Virginia State Legislature has concluded its session. Many bills were introduced; a number of them dealt with health care. Through the Legislative Bulletin we have kept the members of the Association apprised. At times the bills moved so rapidly between introduction and action that only a daily bulletin would have enabled the membership to be kept fully informed; however, your Association was well represented during the entire session.

As these legislative sessions come and go, one thing becomes more and more apparent: the method of medical care delivery in this state and in this nation will be more and more affected by what is done at the Capitol Complex in Charleston or Washington, D. C., than by what we learn in medical school and in postgraduate training. This will be even more true for future generations of physicians.

If the future of health care delivery is to be determined more in the halls of legislatures than in the halls of academia, the course of action for us becomes readily apparent—we must take our battles to the halls of the legislatures. We know that academia will continue to teach medical care of the highest quality. How we use that knowledge will be greatly influenced by the legislative acts.

Several of the bills to which we spoke in opposition either were not passed or were altered markedly. I am certain that they will be introduced again in future legislative sessions along with others just as revolutionary to health care. There is no doubt that groups will return to the legislature again and again to propose bills that would make "doctors" of their members without benefit of the educational requirements we now have.

Our course of action? We must wage a year-round campaign throughout the state to make our views known to House and Senate members. We must support those who share our ideas or those who are willing to listen and work with us. There is little doubt that efforts limited only to sessions of the legislature are grossly inadequate. We must have our legislative goals originate in every town and hamlet, in every county, and made known to every candidate and every legislator.

The battle lines have been drawn. Are we adequate to the task? I think we are; there are more than 2,500 physicians in West Virginia. With the number of people we see with whom we can reason, we can become a potent political force. A force that will never be used for special or self-interest, a force with a single purpose: to provide the highest quality of health care possible at the most reasonable cost to all the people in West Virginia.

John B. Markey

John B. Markey, M. D., *President*
West Virginia State Medical Association

The West Virginia Medical Journal

Editorials

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When do you have—or not have—"data?" That's the question, and it's a crucial one as debate and discussion about a need to regulate health care (particularly hospital) costs certainly will continue to swirl about legislative halls and elsewhere.

DATA'S THE QUESTION

A complex piece of legislation designed to set up a West Virginia Hospital Cost Containment Commission, to review and set hospital rates, failed to win passage during the 1982 legislative session. It was tabled on the Senate floor, 20-14, and never got out of a subcommittee in the House.

The whole area of hospital, and health care, costs is a complex one. A special article in the March issue of *The Journal* addressed several aspects of the matter. Everyone recognizes the public concern. But what's the best way to deal with the issue?

Before any solution, particularly of a legislative nature, is devised, the problem has to be clearly identified. That requires "data" as a departure point. And "data" is in short supply at the moment—at least, the kind that really is needed.

In 1979, the Legislature took a significant initial step with a health care financial disclosure act. It decided, in its legislative findings, that the public has a right to know the financial position of hospitals and related facilities.

It also said the purpose of the 1979 act was to set up machinery for hospitals "to make a public disclosure of their financial position, and to bring about a review as to the costs of health care services."

The act then went on to stipulate what income and expense statements hospitals must file with the State Director of Health; and that such income and expenditures must be published annually in newspapers in the counties where the facilities are located.

So far, so good. But—the Legislature not only provided no funding for implementation of that statute in 1979: it hasn't funded it in subsequent years, either! Bills were introduced, and supported by the West Virginia Hospital Association among others, to get funding in place this year. But they never got out of committee in either house.

Who were opposed to the bills? Some of the groups who strongly support enactment of hospital cost containment legislation. Why that opposition? Presumably because those groups don't want anything in the way—even if it is the collection of essential, basic financial information necessary for any reasonable planning process—of continued efforts to get the containment legislation, period.

Since 1979, the Department of Health staff has done an almost unbelievable job of dealing with stacks and stacks of paper, figures, etc., received from hospitals. Without funding, and with only about the equivalent of one and one-half persons available to work with the submissions, the agency has managed to prepare two or three reports at least approaching a digest of the figures.

The reports haven't been perfect. Some "reviewers" have taken issue with various interpretations and conclusions emerging from the jungle of information with which the reports have dealt. That can be expected even under the best circumstances, with a subject so detailed and complex, but with a process in its initial phases, the problem is magnified.

Still other reports will be provided. However, are we talking about "data?" We think not. Piles of paper and figures don't become "data" until one has professional, thorough and appropriate review and analysis of them—and the development of polished summaries and the like of those figures by a qualified staff sufficient to do that job.

But without "data," how can one reasonably and logically determine whether hospital cost containment legislation really is needed in West

Virginia; or if it represents the best approach to health care cost concerns?

We don't think that determination can be made without the proper base. And the base must be real, honest-to-goodness "data," something, again, that simply isn't there at the moment.

PEER REVIEW

Medicine's continuing commitment to the development and maintenance of voluntary, professionally-directed peer review mechanisms will come under increased scrutiny in the months ahead, particularly as public and other attention remains focused on health care costs.

The American Medical Association's House of Delegates has adopted a set of principles for such review, and has suggested that their general content should be found in any organization or system put into place.

Consideration of the principles, and frequent reference to them, should be helpful in ongoing efforts to assure the quality and appropriateness of medical care. In fact, the first principle notes that "medical peer review is an organized effort to evaluate and analyze medical care services delivered to patients, and to assure the quality and appropriateness of these services . . . "

The second and third principles identify medical peer review as a local process; and note that physicians ultimately are responsible for all peer review of medical care.

Physicians involved in peer review should be representatives of the medical community; and participation must be structured to obtain maximum involvement of the medical community. Any peer review process must provide for consideration of the views of individual physicians, groups of physicians, or institutions under review, the fourth principle stresses.

The fifth point emphasizes that peer review evaluations are based on appropriateness, medical necessity, and efficiency of services to assure quality medical care. Principle No. 6 says any system of medical peer review must have established procedures.

Peer review, stipulates the seventh principle, of medical practice and the patterns of medical practice of individual physicians, groups of physicians and physicians within institutions is an ongoing process of assessment and evaluation.

The eighth principle calls peer review an educational process for physicians to assure quality medical services. And the last, and ninth, point stresses that any peer review process must protect the confidentiality of medical information obtained and used in conducting the review process.

There's nothing new or startling in the set of principles. The challenge is keeping them together in a workable framework—and using them.

The results can be many—quality and cost-effective medical care; a solid approach to continuing medical education; and a strong component in overall risk management efforts to hold down professional liability problems.

A NEED

There is still the need for the complete physician who will deal with the body, the soul, and the psyche; the need for the physician who is willing to practice the art as well as the science of medicine; one who will give the patient a chance to talk, without the quick brush-off!

The "headache" or "backache" may be an alcoholic husband or an unresponsive wife for whom the intimacies are only wifely duty. For this there is no prescription of pills, laboratory, or x-ray that will help; here, only a humane physician will be of help. All of which goes back to Sir William Osler's admonition: "Let them talk!" — *Lester J. Candela, M. D., in the New York State Journal of Medicine.*

Our Readers Speak

President's Message Applauded

(Addressed to John B. Markey, M. D., President, West Virginia State Medical Association)

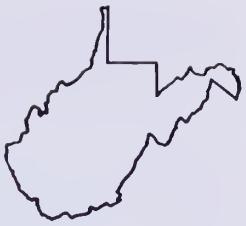
I read with exhilaration and a favorable impression your message from the President [February issue of *The Journal*] about the treatment of Welfare recipients.

I have been saying for some time in various meetings that the medical profession, if it is to excel and continue to use its capabilities, must decide whether it is to be taxed directly or indirectly. Indirect taxation is the assumption of Medicaid or other deserving individuals into physicians' practice even at the cost of their own income, which otherwise would have been taxed out in any event, or passing the cost on to their other patients. It certainly would be favorably received by the community-at-large, and would blunt those efforts being made not only to dilute out the true physician care, but to view the professional in general as an unsympathetic technician.

Again, I congratulate you on the message. I am looking forward to working with you in the future, and certainly hope that the West Virginia State Medical Association will continue what has been an excellent relationship in the last year—one that I have very much appreciated.

L. Clark Hansbarger, M. D., Director
West Virginia Department of Health

GENERAL NEWS



HHS Assistant Secretary Brandt Convention Keynoter

Dr. Edward N. Brandt, Jr., Assistant United States Secretary for Health in the Department of Health and Human Services (HHS) in Washington, will speak during the State Medical Association's 115th Annual Meeting in August. The announcement was made by the Annual Meeting Program Committee.

Doctor Brandt, who has held his present post since May, 1981, will deliver the keynote Thomas L. Harris address at 9 A. M. opening exercises on Friday, August 27. The convention will be held August 26-28 at the Greenbrier in White Sulphur Springs. It will begin with a pre-convention session of the Association's Council and the first session of the House of Delegates on Thursday morning and afternoon, August 26; and end with the second and final House session and reception for new Association officers on Saturday afternoon and evening.

As Assistant Secretary for Heatlh, Doctor Bandt directs the activities of the Public Health Service, which includes the Health Services Administration; the Alcohol, Drug Abuse and Mental Health Administration; the Centers for Disease Control; the Food and Drug Administration; the Health Resources Administration; and the National Institute of Health.

Provides Policy Guidance

Doctor Brandt provides policy guidance for other HHS health programs including the Health Care Financing Administration, which administers Medicare and Medicaid. He also maintains relationships with other governmental and private agencies concerned with health. He advises and assists the Secretary on health policy and on all health-related activities of the Department.

Before joining HHS, Doctor Brandt was associated with the University of Texas. Since 1977, he had been Vice Chancellor for Health Affairs for the University system, based in Austin. From 1970 to 1977, he was Executive Dean of the University's Medical Branch in Galveston. He also had served since 1970 as Professor in the University's Departments of Preventive Medicine and Family Medicine. From 1962 to 1970, Doctor Brandt was at the University of Oklahoma Medical Center, first as Director of the Medical Research Computer Center, and later as Associate Dean.

He was born in Oklahoma City, receiving his B.S degree in mathematics from the University of Oklahoma in 1954, and an M.S. degree in mathematics from Oklahoma State University in 1955. He earned his M.D. in 1960 from the University of Oklahoma Medical Center, and a Ph.D. in biostatistics from the same university in 1963. Doctor Brandt served his internship at the Veterans Administration Hospital in Oklahoma City, and was an internal medicine resident at the University of Oklahoma Medical Center.

He has been active in various committees of the American Medical Association, Texas Medical Association and the American Association of Medical Colleges. At the time of his confirmation

Edward N. Brandt, Jr., M. D.

as Assistant Secretary for Health, he was serving as Chairman of the AMA's Section on Medical Schools. Doctor Brandt also is a member of the American Academy of Family Physicians' Commission on Legislation and Governmental Affairs.

Doctor Brandt has published extensively, and has made significant contributions to the professional literature throughout the entire range of health and statistical issues.

He and his wife have three sons: Patrick James, Edward N. III and Rex Carlin.

AMA President to Speak

Doctor William Y. Rial, as announced previously, will address the first House session Thursday afternoon. Doctor Rial, a family physician from Swarthmore, Pennsylvania, will be installed as President of the AMA in Chicago in June.

Scientific sessions of the Annual Meeting will be held Friday morning, immediately following the opening exercises, and Saturday morning. As announced previously, Dr. Malcolm D. Graham, Professor and Vice Chairman, Department of Otorhinolaryngology at the University of Michigan, will speak during the Friday morning scientific session, a "Symposium on Common Disorders of the Eye, Ear and Mouth." His topic will be "Dizziness: Current Thoughts on Diagnosis and Management."

Dr. Henry A. Wise II, also as announced previously, will present a paper on "Recent Advances in Urology" during the second scientific session Saturday morning. Doctor Wise is Director and Associate Professor, Division of Urology, Department of Surgery at Ohio State University.

Other topics for the Saturday morning scientific session will cover new developments and/or trends in sports medicine, plastic surgery and neurology-neurosurgery.

Sections, Societies to Meet

About a dozen sections and affiliated societies will have business and scientific sessions on Friday and Saturday, primarily in the form of breakfast and luncheon meetings.

Dr. Harry Shannon of Parkersburg, during the second House session on Saturday, will be inaugurated as President to succeed Dr. John B. Markey of Charleston.

Serving on the Program Committee are Drs. Carl J. Roncaglione, South Charleston, Chairman; Jean P. Cavender, Charleston; Thomas P. Long, Man; David Z. Morgan, Morgantown; Kenneth Scher, Huntington, and Doctor Shannon.

The Annual Meeting of the Auxiliary to the State Medical Association, with Mrs. Logan W. Hovis of Vienna in charge as the Auxiliary's President, again will run concurrently with the Association's convention.

More specific information relative to other general session topics and speakers will be provided in upcoming issues of *The Journal.*

Abortion Notification Act Vetoed By Governor

Governor John D. Rockefeller IV vetoed as unenforceable and unconstitutional a 1982 legislative enactment requiring parental notification prior to performance of an abortion on a young woman under age 18.

The Governor's Office also found a technical defect in the act's title, in a continuation of mechanical problems which have plagued the Legislature in recent years.

The State Medical Association was among those urging veto of the bill after its Council found that the notification provision was "an undesirable interference in the physician-patient relationship."

Others said that language in a House amendment that, among other things, would have made a medical procedure performed by one not licensed as a physician—and which might be foreseen as likely to result in an abortion—a felony would have raised serious problems for family planning programs.

MU Residency Accredited

Full accreditation of the Marshall University School of Medicine's residency program in pathology has been awarded by the Accreditation Council for Graduate Medical Education (ACGME).

The four-year residency program was granted full accreditation following a four-year period under provisional accreditation, according to Dr. Stebbins B. Chandor, MU Pathology Department Chairman and Program Director.

The medical school's residency program offers graduate training in anatomic and clinical pathology in conjunction with Cabell Huntington Hospital, St. Mary's Hospital and the Huntington Veterans Administration Medical Center.

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1982, as compiled by Dr. Robert L. Smith, Assistant Dean for Continuing Education, and J. Zeb. Wright, Ph. D., Coordinator, Continuing Education, Department of Community Medicine, Charleston Division. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of The Journal.)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Morgantown, Charleston and Wheeling campuses. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, 3110 MacCorkle Avenue, S. E., Charleston 25304; Office of Continuing Medical Education. WVU Medical Center, Morgantown 26506; or, Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

June 4-5, Morgantown, Anesthesia Update '82

June 5, Charleston, Ninth Annual Bert Bradford Wildwater Surgical Conference

June 11-12, Morgantown, Eighth Annual ENT Teaching Days

Regularly Scheduled Continuing Education Outreach Programs from WVU Medical Center/ Charleston Division

Buckhannon, St. Joseph's Hospital, 3rd floor, 3rd Thursday, 7-9 P. M.—May 20, "Hypertension and Cardiac Drugs: Interaction," Carl Malanga, Ph.D.

June 17, "Poison Control," Kathryn Sensabaugh, R. N.

Cabin Creek, Cabin Creek Medical Center, Dawes, 2nd Wednesday, 8-10 A. M.—May 12, "Common Musculo-Skeletal Problems in Children," Robert Ghiz, M. D.

Gassaway, Braxton Co. Memorial Hospital, 1st Wednesday, 7-9 P. M.—May 5, "Diagnosis and Management of Common Dermatological Problems," Robert B. Point, M. D.

June 2, "Ambulatory Rheumatology," John W. Byrd, M. D.

Madison, Allied Health Room, Boone Career Center, West Madison, 2nd Tuesday, 7-9 P. M. — May 11, "Rheumatology Update: Drug Therapy & Management," John W. Byrd, M. D.

June 8, "Blood Disorders: Diagnosis, Treatment & Referral," Steven Jubilerer, M. D.

Oak Hill, Oak Hill High School (Oyler Exit, N 19) 4th Tuesday, 7-9 P. M.—May 25, "Diagnosis & Management of Diabetes," Daniel B. MacCallum, M. D.

June 22, "Pediatric Oncology: New Hope," Jean Ross, M. D.

Welch, Stevens Clinic Hospital, 3rd Wednesday, 11 A. M.-1 P. M.—May 19, "Infectious Diseases in Children," Edwin Anderson, M. D.

June 16 (to be announced).

July 21, "Anxiety: The Therapeutic Dilemma," Richard Koon, M. D.

Whitesville, Raleigh-Boone Medical Center, 4th Wednesday, 11 A.M.-1 P. M. — May 26, "Diagnosis and Treatment of Chronic Alcoholism" (film series from Dartmouth Medical College).

Williamson, Appalachian Power Auditorium, 1st Thursday, 6:30-8:30 P. M.—May 6, "Anxiety: The Therapeutic Dilemma," Sid Lerfald, M. D.

State Anesthesiologists Plan Morgantown Meeting

Five physicians from Florida, Washington, D. C., and Pennsylvania will be on the visiting faculty for the annual meeting of the West Virginia State Society of Anesthesiologists June 4-5.

The meeting will be held at the Lakeview Inn and Country Club in Morgantown.

Members of the visiting faculty and their topics will be:

"Problems with Anesthesia Equipment-Part I" —Jerry Dorsch, M. D., St. Vincent's Medical Center, Jacksonville, Florida; "Problems with Anesthesia Equipment-Part II"—Susan Dorsch, M. D.; Riverside Hospital, Jacksonville; "The Challenges of Modern Intensive Care"—William Knaus, M. D., George Washington University Medical Center, Washington, D. C.;

(continued on next page)

"Malignant Hyperpyrexia: Problems and Perspectives"—Henry Rosenberg, M. D., Hahnemann Medical College and Hospital, Philadelphia; and "Anesthetic Procedures in Diagnosis and Therapy: The Epidural Technique"—John Cwik, M. D., Conemaugh Valley Memorial Hospital, Johnstown, Pennsylvania.

Lecturers from the Department of Anesthesiology at West Virginia University Medical Center will be Drs. Harakh V. Dedhia, on "New Developments in Cardiovascular Drugs," and Terring Heironimus III, "Clinical Experiences with Nubain (Nalbuphine)."

For additional information, contact the office of Dr. Richard B. Knapp, Professor and Chairman, WVU Department of Anesthesiology, Morgantown, the WVSSA Secretary-Treasurer.

Doctor Waldman Acting WVU Medical Dean

Dr. Robert H. Waldman has been named Acting Dean of the West Virginia School of Medicine pending selection of a successor to Dean John E. Jones, M. D.

Doctor Waldman, Chairperson of the School's Department of Medicine, assumed the post on April 5, the date on which Doctor Jones became WVU Vice President for Health Sciences.

Robert H. Waldman, M. D.

Doctor Waldman joined the WVU faculty as Chairperson of Medicine, the School's largest department, in 1976 after having served as Associate and Acting Chairperson of the Department of Medicine at the University of Florida College of Medicine.

His subspecialty is infectious diseases, and he has authored or co-authored three books and 165 papers or book chapters. He speaks frequently at national and international meetings, and has been awarded an international prize for his research.

A native of Dallas, Doctor Waldman received his bachelor's degree from Rice University and his M. D. from Washington University Medical School in St. Louis. He did his residency in internal medicine at Johns Hopkins. After military service in 1965-67, he was awarded a postdoctoral fellowship by the National Institutes of Health, and served eight years on the University of Florida faculty before coming to WVU.

A search committee will be appointed to nominate a successor to Doctor Jones as Dean of the School of Medicine.

Doctor Jones succeeds W. Robert Biddington, Dean of the School of Dentistry who has been serving as Interim Vice-President for Health Sciences since Dr. Charles E. Andrews returned to a fulltime professorship in pulmonary medicine after 13 years as Vice-President.

Council Approves Updating Of Office Procedures

The State Medical Association's Council has approved the purchase of electronic word processer equipment for the state office, and coming months will see steps toward considerable improvement in handling of membership, financial and other procedures for a growing organization.

The Council action came at a March 21 meeting which represented a rare combination of winter (January) and spring (April) sessions. The scheduled January meeting was cancelled because of bad weather.

Among factors in the decision to move into word processing was the steady growth of the Medical Association over recent years, and accompanying needs for more efficient handling of various office routines. The Association showed a total membership of 2,261, including honorary and retired members, as of March 19—in comparison with 1,400 members at the end of 1975.

Other Matters

In other matters before it, Council:

—Heard an update of the Association-endorsed professional liability insurance program, with CNA of Chicago as the carrier; and program improvements under consideration, including further attention to consent-to-settle provisions in the contract and refinement in classification of physicians for coverage.

—Paid tribute to the late C. A. Hoffman, M. D., of Huntington, and the late Richard E. Flood, M. D., of Weirton, Past Presidents of the Association and long-time leaders in organized medicine who died in December and February, respectively.

—Heard from L. Clark Hansbarger, M. D., West Virginia Director of Health, an outline of organizational and program changes effected in the Department of Health, including those in institutional services and the upgrading of be-

haviorial health program status—along with intensified efforts to develop better community-level coordination and understanding of public health programs.

—Approved honorary membership status, after appropriate component society action, for Drs. Lawrence B. Gang, Huntington (Cabell); P. A. Tuckwiller and James H. Nelson, Charleston (Kanawha); Franklin W. Mallamo, Fairmont (Marion); William E. King and Isaiah A. Wiles, Morgantown (Monongalia), and Robert T. Humphries, Clarksburg (Harrison).

—Approved retired membership status for Drs. R. J. Sexton, Nitro (Kanawha); Andrew H. Henderson of Turkey Creek, Kentucky, and Arthur E. Levy, Williamson (Mingo); Leonard E. Yurko, Weirton (Hancock), and Donald C. Dickenson, Morgantown (Monongalia).

—Heard a summary of 1982 legislative activity from Executive Secretary Charles R. Lewis and Staff Counsel Robert F. Bible; and adopted a motion calling upon Governor John D. Rockefeller IV to veto an act providing for parental notification of proposed abortions for young women under age 18 as an "undesirable interference in the physician-patient relationship."

Review A Book

The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal*, Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication.

Current Medical Diagnosis & Treatment 1982, by Marcus A. Krupp, M. D.; and Milton J. Chatton, M. D. (with associate authors). 1,113 pages. Price $23. Lange Medical Publications, Los Altos, California 94022. 1982.

Physician's Handbook, 20th Edition, by Marcus A. Krupp, M. D.; Lawrence M. Tierney, Jr., M. D.; Ernest Jawetz, M. D., Ph.D.; Robert L. Roe, M. D.; and Carlos A. Camargo, M. D. 774 pages. Price $12. Lange Medical Publications, Los Altos, California 94022. 1982.

Current Pediatric Diagnosis & Treatment, 7th Edition, by C. Henry Kempe, M. D.; Henry K. Silver, M. D., and Donough O'Brien, M. D. 1,106 pages. Price $26. Lange Medical Publications, Los Altos, California 94022. 1982.

Conference, Wildwater Trip Scheduled By Surgeons

Eight physicians from West Virginia, Pennsylvania, Kentucky and Ohio will be on the faculty for the ninth annual Wildwater Surgical conference June 4-5.

The scientific session will be held on Saturday, June 5, at the West Virginia University Medical Education Building in Charleston. Offered on Friday is a wildwater trip on New River from Thurmond to Fayette Station (15 miles).

Thomas Starzl, M. D.

Speakers and their topics on Saturday will include "Abdominal Aortic Aneurysm"—R. Thomas Linger, M. D., Clinical Associate Professor of Surgery, WVU Charleston Division; "Controversies in Trauma Management" — Jerry M. Shuck, M. D., Oliver H. Payne Professor and Chairman, Department of Surgery, Western Reserve University, Cleveland; "Ischemic Bowel"—S. Willis Trammel, M. D., Clinical Assistant Professor of Surgery, WVU Charleston Division;

"Post-Gastrectomy Syndrome" — Ward O. Griffen, M. D., Professor and Chairman, Department of Surgery, and Professor of Physiology and Bigographics, University of Kentucky; "Hyperparathyroidism" — Charles G. Watson, M. D., Associate Professor of Surgery, University of Pittsburgh; "Breast Reconstruction after Surgery"—Jacques Charbonniez, M. D., Clinical Professor of Surgery, WVU Charleston Division;

Cardiac Transplantation

"Cardiac Transplantation and Mountain Medicine"—Henry Bahnson, M. D., Professor and Chairman, Department of Surgery, University of Pittsburgh; and "Liver Resection" — Thomas Starzl, M. D., Professor of Surgery, University of Pittsburgh.

Sponsored by WVU Charleston Division and Charleston Area Medical Center, the conference is approved for five and one-half credit hours in Category 1 of the Physician's Recognition Award.

The registration fee for physicians for the scientific session is $50 ($55 after June 1). For additional information, telephone (304) 347-1242.

The fee for the wildwater trip is $58. For additional information or reservations, call (304) 348-5511.

Welfare Moves Toward Use Of Uniform Billing

Plans for the adoption of the HCFA 1500 universal billing form concept to the Medicaid Program operated by the West Virginia Department of Welfare are in the final stages of completion.

This adoption of the uniform claim form came about as a result of the many requests of physicians, and the initiative of Richard Shaw, State Insurance Commissioner, and Commissioner Leon Ginsberg of the Department of Welfare.

The welfare agency has indicated it plans to seek the assistance of selected physicians in different locations in the state to participate in a test phase prior to the total implementation of the HCFA 1500.

"In the very near future, the Department of Welfare may be in contact with you, requesting that you participate in the testing of this universal billing concept which, when implemented, should be an aid in reducing the number of different billing forms in use in your office," a Department spokesman advised physicians.

"Your participation in this test period is respectfully solicited, and if you are willing to participate further, information will be furnished regarding training for your billing clerks," the agency added.

New Product For Herpes Approved By FDA

The West Virginia Department of Health is calling to the attention of physicians a new product, acyclovir ointment, the first drug to help manage genital herpes. The ointment, recently approved by the Food and Drug Administration, has been shown in tests to shorten the episodes of the disease, though not cure it.

For additional information, contact the Department's Bureau of Venereal Disease Control.

Board of Medicine Moves

The West Virginia Board of Medicine has moved to a new address in Charleston: 3412 Chesterfield Avenue, S. E., Charleston 25304.

The telephone number is the same: (304) 348-2921.

The move was effective April 15.

Medical Meetings

May 2-5—WV Academy of Ophthalmol. & Otolaryngol., White Sulphur Springs.

May 5-6—Am. Society for Head & Neck Surgery, Palm Beach, Fla.

May 6-9—NC Med. Society, Pinehurst.

May 10-14 — Am. Roentgen Ray Society, New Orleans.

May 13-16 — Federation of State Medical Boards, New Orleans.

May 14-15—Cystic Fibrosis Foundation, Washington, D. C.

May 16-20—Am. Urological Assn., Kansas City, Mo.

May 21-22 — Phacoemulsification-Extracapsular/ Posterior Chamber Implant (Blaydes Foundation), Bluefield.

June 13-16 — Am. College of Surgeons, Gleneden Beach, OR.

June 13-17 — Annual Meeting of AMA House of Delegates, Chicago.

June 13-18—2nd. Annual School on Behavioral Health Studies (WV Dept. of Health, etc.), Morgantown.

Aug. 26-28—115th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Aug. 30-Sept. 2—Am. Hospital Assn., Atlanta.

Sept. 20-23—Am. College of Radiol., Boston.

Sept. 29-Oct. 2—Am. Neurological Assn., Washington, D. C.

Sept. 30 - Oct. 2 — Women's Health Conference (WVU), Morgantown.

Sept. 30-Oct. 3—ASIM, Chicago.

Oct. 4-7—AAFP, San Francisco.

Oct. 22-24—PA Med. Society, Philadelphia.

Oct. 23-28—Am. Academy of Pediatrics, New York City.

Oct. 24-29—Am. College of Surgeons, Chicago.

Oct. 30-Nov. 2—Southern Med. Assn., Atlanta.

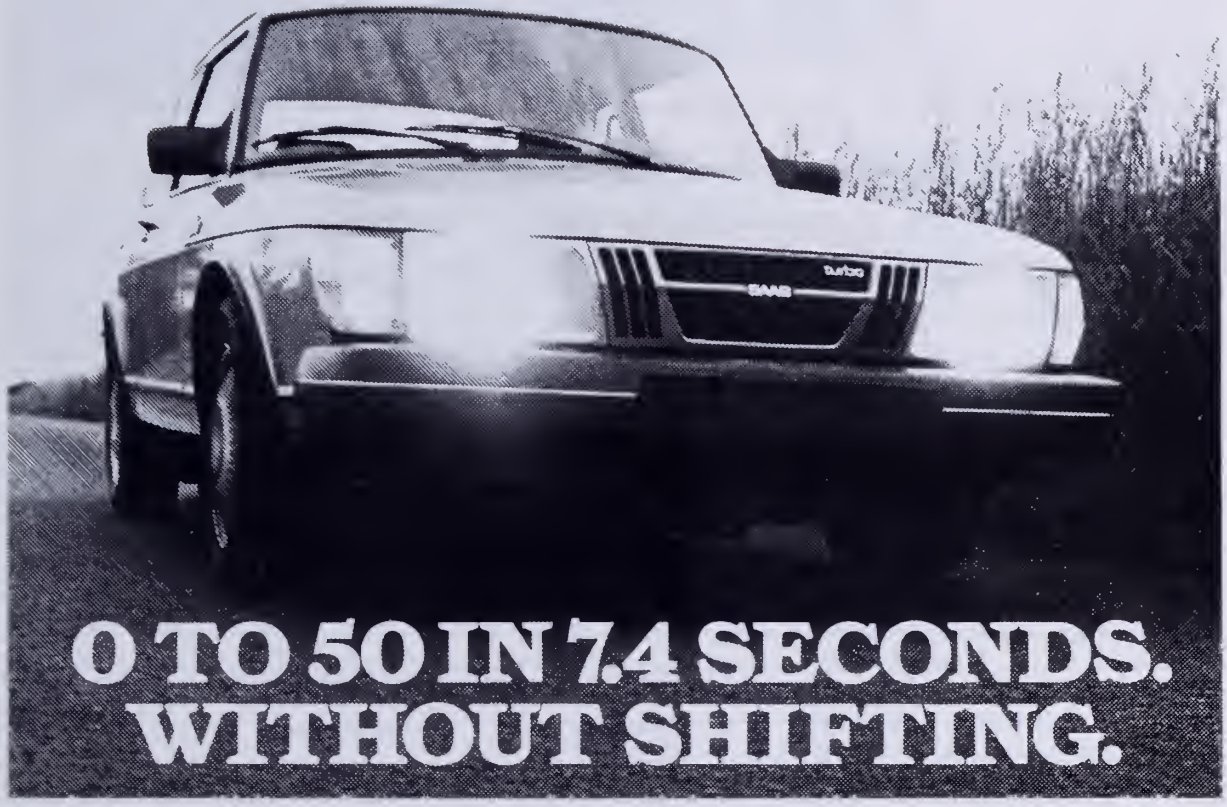
Nov. 4-6—Am. Cancer Society, New York City.

Nov. 10-14—Med. Society of VA, Williamsburg.

Nov. 15-18—Am. Heart Assn., Dallas.

1983

Jan. 21-23—16th Mid-Winter Clinical Conference, Charleston.



Lots of people have been admiring the 5-speed Saab Turbo, but didn't want to give up the ease of an automatic transmission.

Well, now we have a car just for them: the Saab Automatic Turbo. In some ways, it's the perfect solution. It gets you through stop-and-go city traffic, for instance, as nicely as it gets you onto the expressway. And between two parked cars as effortlessly as around two moving trucks.

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WVU Medical Center
–News–

Compiled from material furnished by the Medical Center News Service, Morgantown, W. Va.

Insulin Pump Helps Diabetic To Have Normal Baby

"Patrick and Jayne Eacho announce the birth of their first child, a daughter, Kate Elizabeth Eacho, on March 4, 1982, at West Virginia University Hospital. Weight—six pounds. Mother and baby doing well."

Events surrounding this birth are not what that "typical" announcement might indicate.

Wanted and planned for by her eager and bright young parents, Kate Elizabeth Eacho also is a lucky baby in less conventional ways. She's certainly a first in West Virginia. And the careful planning and care that went into her mother's pregnancy and delivery could serve as a prototype for the births of many babies whose mothers are diabetic.

Jayne Eacho used a portable insulin pump during pregnancy. The experiences of the only seven reported cases in the medical literature were followed at Yale University School of Medicine's Clinical Research Center. But unlike those patients, Jayne Eacho's use of the pump to provide her insulin needs began before her pregnancy.

Six Patients in Study

She is one of six diabetic patients in a special study being conducted by A. M. Vazquez, M. D., Professor of Family Practice and Pediatrics at the WVU School of Medicine, who obtained the insulin pumps under a grant from the Eli Lilly Company to study their long-term effects on diabetes and to see if their use can improve the course of the disease.

Worn on a belt under the clothing, the small, camera-sized device contains a syringe, and pumps programmed, but adjustable, amounts of insulin through tubing attached to a needle inserted under the skin on the abdomen and taped in place.

Almost a year ago, Jayne Eacho asked Doctor Vazquez if she could use a pump, because she "wanted tight control" of her diabetes before becoming pregnant. About a months after she started to use the pump she was pregnant, and Doctor Vazquez referred his now high-risk maternity patient to the care of Juan L. Granados, M. D., Associate Professor of Obstetrics and Gynecology at WVU and the state's only board-certified specialist in maternal-fetal medicine.

Although her baby was delivered three weeks before term, there was no cause for concern. An amniocentesis performed a week earlier showed the baby was fully mature, and plans were made to admit her to University Hospital March 4 for a cesarean section to be done the following day because of persistent breech presentation. She worked until noon that day, and as she was being admitted to the hospital that afternoon her membranes ruptured. By 5 P.M., Doctor Granados had delivered Kate Elizabeth.

Medical Honorary Society Names New Members

New members of WVU School of Medicine's Chapter of Alpha Omega Alpha honor medical society recently were announced by Bill Sigmund of Beckley, fourth-year medical student and President.

They are: Douglas Althouse, Charleston; Kathryn Lowry, Morgantown; Mark Minor, Wellsburg; Terry Schwartz, Charleston; Rosanna Sikora, Weirton; Joe White, St. Albans, and Ron Gross, Huntington, all fourth-year students.

New AOA members from the third-year class are Anne C. Cutlip, Carolyn Looney, Jack Steel and Vincent Traynelis, all of Morgantown; Linda Gray, Wheeling; Stephen Powell, Scott Depot, and Gary Renaldo, Fairmont.

The WVU Chapter was one of only 20 in the nation to receive an AOA visiting professorship this year.

It was host March 23-27 to George Libman Engel, Professor of Medicine and Psychiatry at the University of Rochester (New York) School of Medicine and Dentistry, for a series of lectures and discussions including the annual AOA lecture.

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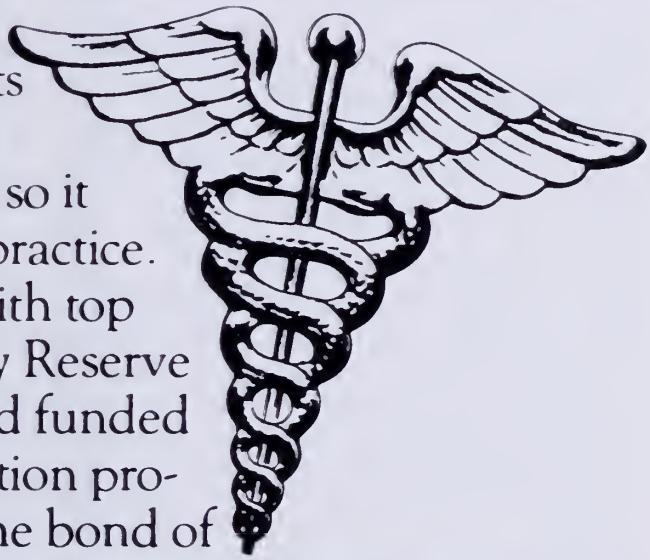

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Third-Party News, Views and Program Concerns

Court's Vote In AMA-FTC Case Leaves Issues Unresolved

The U.S. Supreme Court's recent four-to-four tie vote that left standing a lower court order upholding the Federal Trade Commission in its dispute with the American Medical Association over physician advertising failed to resolve conclusively the issue of the FTC's overall jurisdiction over professional associations. The Supreme Court action, the AMA immediately commented, means that Congress ultimately will have to deal with the matter.

Joseph F. Boyle, M. D., Chairman of the AMA Board of Trustees, said that the Association was "disappointed by the Supreme Court decision that failed definitively to resolve the important issues raised by the FTC's attempts to regulate the medical profession. This has been a long-drawn-out case, stretching out over seven years," he continued, and the AMA "had hoped that the Supreme Court would decide the important issues itself."

The Court's deadlocked vote—Justice Harry Blackmun excused himself from consideration because he previously had represented clients in the medical field—means that "it may now be appropriate for Congress to consider the issues the court failed to resolve, and clarify the law," Doctor Boyle said.

Affirms Appeals Court Decision

The Supreme Court vote had the effect of affirming the decision of the U.S. Circuit Court of Appeals, which ordered the AMA to cease and desist from regulating certain business aspects of the medical profession and to disaffiliate any component society that fails to comply with the FTC's original order as modified. "The AMA can promulgate reasonable ethical guidelines that prohibit misleading, false, or deceptive advertising," Doctor Boyle explained. An additional modification allows organized medicine to conduct professional peer review of fee practices of physicians, he added.

Another provision of the appellate court order calls for the AMA to disaffiliate for one year any component society that violates the order. Doctor Boyle pointed out that this provision will be difficult to enforce, since component societies are autonomous. Earlier, both the American Dental Association and the Broward County (Florida) Medical Association had entered consent decrees that bound them to the same ruling that affects the AMA. "The big issue is whether or not the FTC will regulate the medical profession," Doctor Boyle said.

The Supreme Court's order said simply, "The judgment is affirmed by an equally divided court." This raises the possibility that if a similar case not involving the medical profession directly were to reach the High Court, Justice Blackmun might participate and cast the deciding vote. Until such a time, however, the Supreme Court has left standing the 1980 two-to-one Appeals Court ruling that upheld the FTC's 1979 order barring medical associations from interfering with physicians' attempts to advertise.

Complaint Filed in 1975

The legal issue arose in 1975, when the FTC filed a complaint against the AMA, the Connecticut State Medical Society, and the New Haven County Medical Association, charging that their ethical principles forbidding false and misleading advertising were in restraint of trade. Cited by the FTC was a 1975 Supreme Court decision that, for the first time, strictly applied the antitrust statutes to professional associations in a case involving the Virginia Bar Association and minimum fees.

The AMA has contended that dissemination of fee information and other non-deceptive information that would help patients to make an informed choice among competing professionals is ethical, but that misleading promotional practices are unethical. The Supreme Court heard arguments on the case last January. At that time, the AMA urged the justices to rule that the FTC didn't have the power to interfere with ethical standards propounded for a professional association.

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Obituaries

ROBERT G. ARRINGTON, M. D.

Dr. Robert G. Arrington of Huntington, a staff physician at the Marshall University School of Medicine Family Care Outpatient Clinic, died on March 18. He was 61.

Doctor Arrington, a native of Dehue (Logan County), also was on the staffs of Cabell-Huntington Hospital and Huntington Hospital.

He was graduated from West Virginia University and received his M. D. degree in 1944 from Jefferson Medical College. He interned at the former Charleston General Hospital in Charleston, completed a residency in obstetrics-gynecology at Crawford Long Hospital in Atlanta, and a residency in obstetrics at St. Mary's Hospital in Huntington.

A World War II U. S. Navy veteran, Doctor Arrington retired in 1974 as Commander in the Naval Reserve with 32 years of service. He was a member of the Cabell County Medical Society and the West Virginia State Medical Association.

Survivors include the widow; two daughters, Mrs. Janet Watson of Huntington and Mrs. Etna Virginia Diggs of Rex, Georgia; a son, Dr. Robert R. Arrington of Venice, Florida; and the mother, Mrs. Mary C. Arrington of Portsmouth, Ohio.

* * *

IRWIN S. ESKWITH, M. D.

Dr. Irwin S. Eskwith, Ripley internist and cardiologist, died on March 21 in a Parkersburg hospital. He was 66.

Doctor Eskwith was a staff member of Jackson General Hospital in Ripley and Charleston Area Medical Center. He was Director of the Continuing Medical Education Program at Jackson General, and Clinical Professor of Medicine at West Virginia University Medical School.

A native of New York City, Doctor Eskwith was graduated from Syracuse University, also receiving his M. D. degree in 1940 from that institution. He interned at St. Vincent's Hospital in Bridgeport, Connecticut, and served residencies at Goldwater Memorial Hospital and Bellevue Hospital in New York City.

Doctor Eskwith was a member of the Western Medical Society and the West Virginia State Medical Association. Coming to West Virginia in 1973, he was a former Clinical Professor at Yale University and a medical officer for the U. S. Army in Europe during World War II.

Surviving are the widow; three sons, Lawrence A. Eskwith of Vail, Colorado, and David and Jason Eskwith, both at home; and a sister, Mrs. Claire Briener of Fairfield, Connecticut.

* * *

DAVID W. MULLINS, M. D.

Dr. David W. Mullins of Logan, specialist in the eye, ear, nose and throat, died on March 23 in a Charleston hospital. He was 50.

Doctor Mullins was a former State Senator and a six-year member and former President of the Logan County Commission.

A native of Stollings (Logan County), he was graduated from West Virginia University and received his M. D. degree in 1948 from the Medical College of Virginia.

Doctor Mullins was a former member of the State Medical Association.

Survivors include the widow; two daughters, Mrs. Ruth Quinn and Mrs. Linda George, both of Mitchell Heights (Logan County); two sons, James W. and Vernon N. Mullins, both of Logan; two sisters, Mrs. Oma Walls of Pittsburgh and Mrs. Virginia Valentine of Malvern, Pennsylvania, and a brother, Dr. George R. Mullins of Logan.

* * *

JOHN H. TROTTER, M. D.

Dr. John H. Trotter, Morgantown eye, ear, nose and throat specialist, died on January 24 in a hospital there. He was 77.

Doctor Trotter was a Past President of the West Virginia Academy of Ophthalmology and Otolaryngology, and a Past President and Past Treasurer of the Monongalia County Medical Society.

Born in Buckhannon, Doctor Trotter was graduated from West Virginia University and received his M. D. degree in 1931 from Emory University. He interned at Uniontown (Pennsylvania) General Hospital and completed postgraduate work at the Memphis (Tennessee) Eye, Ear, Nose and Throat Hospital and the New York Eye and Ear Hospital.

Doctor Trotter was a Diplomate of the American Board of Ophthalmology; a Fellow of the American Academy of Ophthalmology and Otolaryngology; a member of the American College of Surgeons; and an honorary member of the Monongalia County Medical Society, West Vir-

(continued on page xxxii)

County Societies

McDOWELL

The McDowell County Medical Society met on March 10 at Stevens Clinic Hospital in Welch.

The Society observed a minute of silence in memory of the late Dr. Charles F. McCord of Welch, who died on February 11.

The guest speaker was Ms. Vivian Dotson, Coordinator of the McDowell County Black Lung program. She discussed the program in general, and requested referrals from doctors.—Muthusami Kuppusami, M. D., Secretary.

* * *

PARKERSBURG ACADEMY

Dr. Perry Ayres from Harding Hospital in Worthington, Ohio, was the guest speaker for the meeting of the Parkersburg Academy of Medicine on February 10 at the Parkersburg Country Club.

His subject was alcoholism.

Dr. Harry Shannon of Parkersburg, President Elect of the State Medical Association, gave a legislative report, including the Association position on bills then before the State Legislature.—Michael Morehead, M. D., Secretary.

The Academy met again on March 10 at the Parkersburg Country Club. Dr. Maurice A. Mufson of Huntington, Professor and Chairman, Department of Medicine, Marshall University School of Medicine, was the guest speaker.

The Academy approved a donation of $230 for sponsorship of a Little League team, and $200 for Camp Kno Komo.—Manuel Magno, M. D., President.

* * *

CABELL

The Cabell County Medical Society met jointly with its Auxiliary on February 11 at the Holiday Inn Gateway in Barboursville.

The program consisted of a panel of experts discussing "Financial Planning for the Physician and His Family." Members of the panel were Mr. Pat McDonald, CLU; Mr. Milton Herndon, legal counsel, and Mr. David Haught, CPA.

The Society met again on March 11 at the Holiday Inn Gateway in Barboursville.

The guest speaker was Dr. John Tew from the Mayfield Neurological Institute in Cincinnati,

(continued on page xxxii)

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OBITUARIES—*Continued*

ginia State Medical Association and American Medical Association.

He served in the U. S. Army Medical Corps from 1943 to 1945.

Survivors include the widow; two daughters, Mary Ann Glenn of Morgantown and Nancy Anderson of State College, Pennsylvania; a son, George P. Trotter of Naples, Florida; and one brother, Dr. Robert R. Trotter of Morgantown.

COUNTY SOCIETIES—*Continued*

a Past President of the Vascular Surgery Section of the American Association of Neurological Surgeons. His topic was "Cerebral Vascular Disorders: The Recent Advances in Diagnosis and Management." He gave a broad neurosurgical approach to aneurysms, emboli, trauma and A.V. fistulas.—Maurice A. Mufson, M. D., Secretary.

* * *

WESTERN

The Western Medical Society met on March 9 at Roane General Hospital in Spencer.

The guest speaker was Dr. Creel S. Cornwell, Jr., of Clarksburg, Director of the Cardiac Rehabilitation Unit at United Hospital Center, Inc., in Clarksburg. Doctor Cornwell gave a very good talk about cardiac rehabilitation post-coronary and pre-coronary along with a demonstration and handouts.—Ali H. Morad, M. D., Secretary.

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effective against both major otic pathogens...with *b.i.d.* convenience

in acute exacerbations of chronic bronchitis in adults...
clears the sputum and lowers its volume...on *b.i.d.* dosage

in shigellosis...
faster relief of diarrhea than with ampicillin[2]

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii*. It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. Limited clinical information presently available on effectiveness of treatment of otitis media with Bactrim when infection is due to ampicillin-resistant *Haemophilus influenzae*. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.

For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.

For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; patients with documented megaloblastic anemia due to folate deficiency; pregnancy at term; nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age.

Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended, therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.

Pregnancy: Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN:

Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.

Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.

For patients with renal impairment: Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.

ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS IN ADULTS:

Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 14 days.

PNEUMOCYSTIS CARINII PNEUMONITIS:

Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: *Double Strength (DS) tablets*, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100; Prescription Paks of 20 and 28. *Tablets*, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40. *Pediatric Suspension*, containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); cherry-flavored—bottles of 100 ml and 16 oz (1 pint). *Suspension*, containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); fruit-licorice flavored—bottles of 16 oz (1 pint).

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1. Rubin RH, Swartz MN: *N Engl J Med 303* 426-432, Aug 21, 1980. 2. Data on file, Medical Department, Hoffmann-La Roche Inc.

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160 mg trimethoprim and 800 mg sulfamethoxazole

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*due to susceptible strains of indicated organisms

Please see previous page for summary of product information.

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115th Annual Meeting, The Greenbrier
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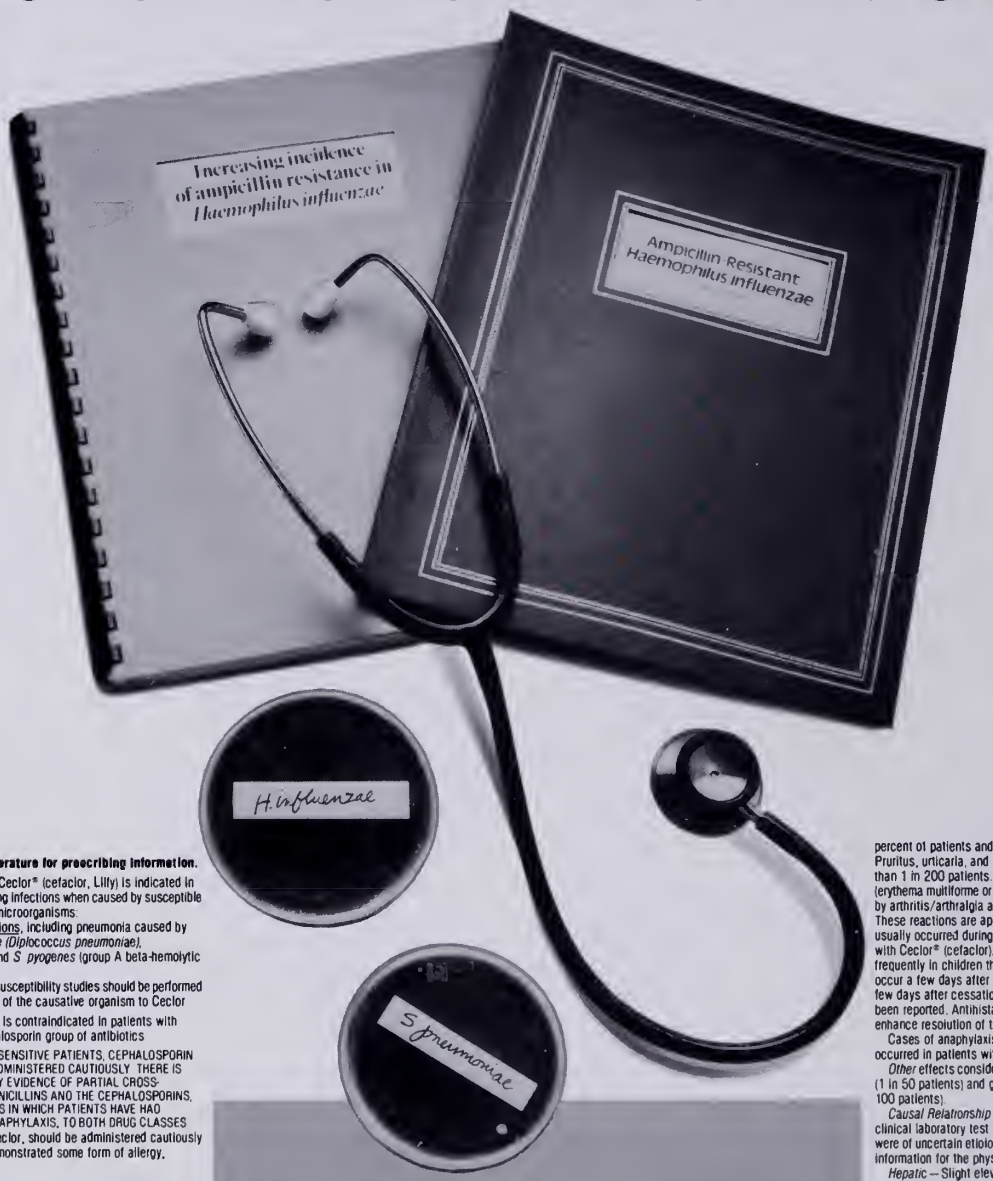
Volume 78 Number 6
June 1982

An added complication... in the treatment of bacterial bronchitis*



Some ampicillin-resistant strains of Haemophilus influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-6]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

Ceclor®
cefaclor

Pulvules®, 250 and 500 mg

Brief Summary.
Consult the package literature for prescribing information.

Indications and Usage: Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Precautions: If an allergic reaction to cefaclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of cefaclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coomb testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such a condition, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Usage in Pregnancy—Although no teratogenic or antifertility effects were seen in reproduction studies in mice and rats receiving up to 12 times the maximum human dose or in ferrets given three times the maximum human dose, the safety of this drug for use in human pregnancy has not been established. The benefits of the drug in pregnant women should be weighed against a possible risk to the fetus.

Usage in Infancy—Safety of this product for use in infants less than one month of age has not been established.

Adverse Reactions: Adverse effects considered related to cefaclor therapy are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70) and nausea and vomiting (1 in 90).

As with other broad-spectrum antibiotics, colitis, including rare instances of pseudomembranous colitis, has been reported in conjunction with therapy with Ceclor.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor® (cefaclor). Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic—Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200). [100281R]

*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.[8]

Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

References

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Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285

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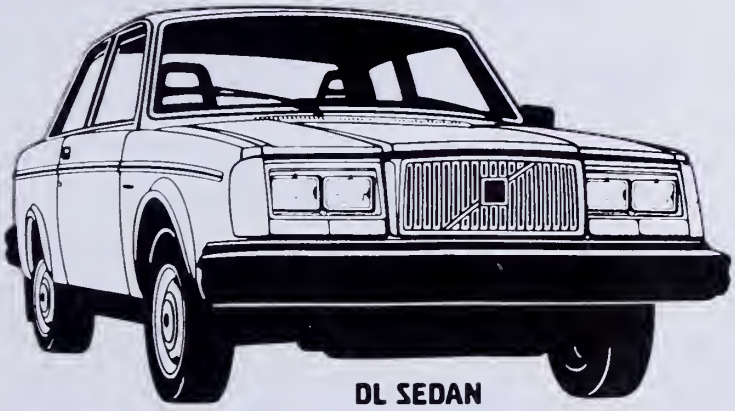

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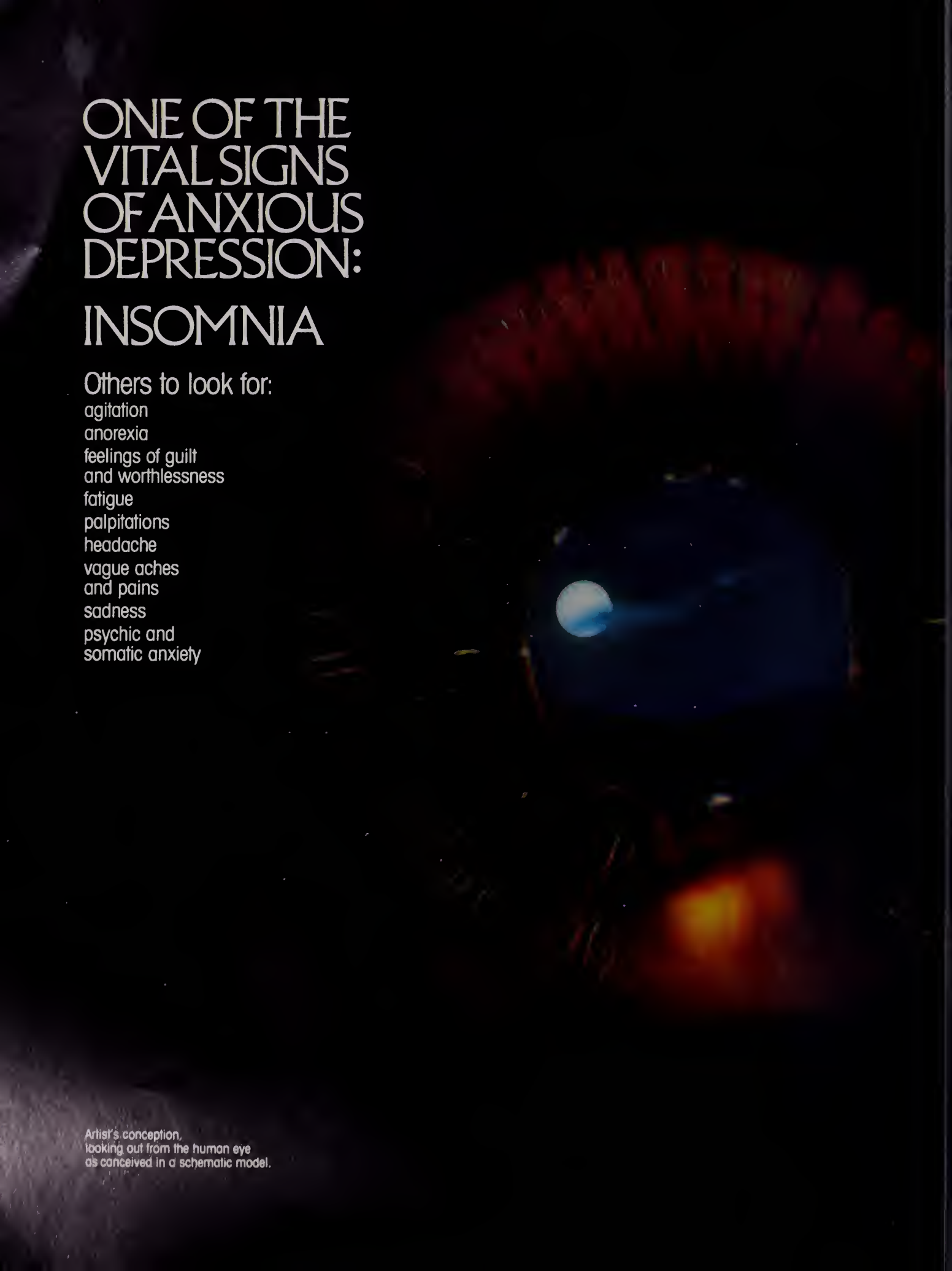

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Please see summary of complete product information on following page.

LIMBITROL® TABLETS Tranquilizer—Antidepressant
Before prescribing, please consult complete product information, a summary of which follows:
Indications: Relief of moderate to severe depression associated with moderate to severe anxiety
Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use, then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction
Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients. (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).
***Usage in Pregnancy:* Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**
Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage. Withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline, symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).
Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. Concomitant use with other psychotropic drugs has not been evaluated. Sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.
Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.
The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs.
Cardiovascular: Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.
Psychiatric: Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.
Neurologic: Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.
Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.
Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.
Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.
Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.
Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female and elevation and lowering of blood sugar levels.
Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.
Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. I.V. administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.
Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single *h.s.* dose may suffice for some patients. Lower dosages are recommended for the elderly. Limbitrol 10/25, initial dosage of three to four tablets daily in divided doses, increased to six tablets or decreased to two tablets daily as required. Limbitrol 5/12.5, initial dosage of three to four tablets daily in divided doses, for patients who do not tolerate higher doses.
How Supplied: White, film-coated tablets, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) and blue, film coated tablets, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500. Tel-E-Dose® packages of 100, available in trays of 4 reverse numbered boxes of 25, and in boxes containing 10 strips of 10. Prescription Paks of 50.

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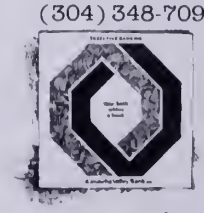

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The Physician's Sleep Glossary

Some common sleep laboratory terms

poly•som•no•graph. An instrument which simultaneously records by electrodes physiological variables during sleep—for example, brain activity (EEG), eye movements (EOG), muscle tonus (EMG) and other electrophysiological variables. These readings indicate precisely when patients fall asleep, how many wake periods they experience, the quality of sleep and the duration of sleep.

sleep la•ten•cy. The period of time measured from "lights out," or bedtime, to the commencement or onset of sleep.

wake time af•ter sleep on•set. Intervals of time spent awake between onset of sleep and the end of the sleep period. The polysomnograph registers the length and frequency of the intervals.

to•tal sleep time. The amount of time actually spent in sleeping. This is estimated by subtracting wake times from the period encompassed by the onset and the termination of sleep.[1]

REM/NREM. 1. REM, or rapid eye movement, sleep is "active"—characterized by increased metabolic rates, elevated temperature and arousal-type EEG patterns. 2. NREM, or non-rapid eye movement, sleep represents "quiet" sleep stages. There are four distinct stages of NREM sleep.[2]

re•bound in•som•nia. A statistically significant worsening of sleep compared to baseline on the nights immediately following discontinuation of sleep medication.[3]

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References: 1. Williams RL, Karacan I: Introduction, chap. 1, in *Sleep Disorders: Diagnosis and Treatment*, edited by Williams RL, Karacan I, Frazier SH. New York, John Wiley & Sons, 1978, p. 2 **2.** Data on file, Hollmann-La Roche Inc., Nutley, NJ. **3.** Kales A *et al: JAMA 241*:1692-1695, Apr 20, 1979. **4.** Kales A *et al: J Clin Pharmacol 17*:207-213, Apr 1977 and data on file, Hollmann-La Roche Inc., Nutley, NJ. **5.** Kales A: Data on file, Hollmann-La Roche Inc., Nutley, NJ **6.** Kales A *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **7.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 15, 1978. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979 **9.** Dement WC *et al: Behav Med 5*(10):25-31, Oct 1978. **10.** Vogel GW: Data on file, Hollmann-La Roche Inc., Nutley, NJ. **11.** Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington, DC, May 3-7, 1971. **12.** Pollak CP, McGregor PA, Weitzman ED: The effects of flurazepam on daytime sleep after acute sleep-wake cycle reversal. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, June 30-July 4, 1975. **13.** Zimmerman AM: *Curr Ther Res 13*:18-22, Jan 1971 **14.** Kales A, Kales JD: *Pharmacol Physicians 4*(9):1-6, Sep 1970 **15.** Data on file, Hollmann La Roche Inc., Nutley, NJ.

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Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, e.g., excitement, stimulation and hyperactivity.

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Bronchitis and pneumonia caused by S. pneumoniae (formerly D. pneumoniae)
Otitis media caused by S. pneumoniae (formerly D. pneumoniae), H. influenzae, and Group A beta-hemolytic streptococci
Acute exacerbation of chronic bronchitis caused by H. influenzae*
*Though clinical improvement has been shown, bacteriologic cures cannot be expected in all patients with chronic respiratory disease due to H. influenzae.

SKIN AND SKIN STRUCTURES (integumentary) infections caused by Group A beta-hemolytic streptococci and staphylococci, non-penicillinase producers.

URINARY TRACT INFECTIONS caused by E. coli and P. mirabilis. (This drug should not be used in any E. coli and P. mirabilis infections other than urinary tract.)

NOTE: Perform cultures and susceptibility tests initially and during treatment to monitor effectiveness of therapy and susceptibility of bacteria. Therapy may be instituted prior to results of sensitivity testing.

Contraindications Contraindicated in individuals with history of an allergic reaction to penicillins.

Warnings Cyclacillin should only be prescribed for the indications listed herein.

Cyclacillin has less in vitro activity than other drugs of the ampicillin class. However, clinical trials demonstrated it is efficacious for recommended indications.

Serious and occasional fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin. Although anaphylaxis is more frequent following parenteral use, it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with history of sensitivity to multiple allergens. There are reports of patients with history of penicillin hypersensitivity reactions who experienced severe hypersensitivity reactions when treated with a cephalosporin. Before penicillin therapy, carefully inquire about previous hypersensitivity reactions to penicillins, cephalosporins and other allergens. If allergic reaction occurs, discontinue drug and initiate appropriate therapy. Serious anaphylactoid reactions require immediate emergency treatment with epinephrine. Oxygen, I.V. steroids, airway management, including intubation, should also be administered as indicated.

Precautions Prolonged use of antibiotics may promote overgrowth of nonsusceptible organisms. If superinfection occurs, take appropriate measures.

PREGNANCY: Pregnancy Category B. Reproduction studies performed in mice and rats at doses up to 10 times the human dose revealed no evidence of impaired fertility or harm to the fetus due to cyclacillin. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, use this drug during pregnancy only if clearly needed.

NURSING MOTHERS: It is not known whether this drug is excreted in human milk. Because many drugs are, exercise caution when cyclacillin is given to a nursing woman.

Adverse Reactions Oral cyclacillin is generally well tolerated. As with other penicillins, untoward sensitivity reactions are likely, particularly in those who previously demonstrated penicillin hypersensitivity or with history of allergy, asthma, hay fever, or urticaria. Adverse reactions reported with cyclacillin: diarrhea (in approximately 1 out of 20 patients treated), nausea and vomiting (in approximately 1 in 50), and skin rash (in approximately 1 in 60). Isolated instances of headache, dizziness, abdominal pain, vaginitis, and urticaria have been reported. (See WARNINGS) Other less frequent adverse reactions which may occur and are reported with other penicillins are anemia, thrombocytopenia, thrombocytopenic purpura, leukopenia, neutropenia and eosinophilia. These reactions are usually reversible on discontinuation of therapy.

As with other semisynthetic penicillins, SGOT elevations have been reported.

As with antibiotic therapy generally, continue treatment at least 48 to 72 hours after patient becomes asymptomatic or until bacterial eradication is evidenced. In Group A beta-hemolytic streptococcal infections, at least 10 days' treatment is recommended to guard against risk of rheumatic fever or glomerulonephritis. In chronic urinary tract infection, frequent bacteriologic and clinical appraisal is necessary during therapy and possibly for several months after. Persistent infection may require treatment for several weeks.

Cyclacillin is not indicated in children under 2 months of age.

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Chronic Infections	500 mg q.i.d.	100 mg/kg/day q.i.d.
Otitis Media	250 mg to 500 mg q.i.d.†	50 to 100 mg/kg/day t.i.d.†
Skin & Skin Structures	250 mg to 500 mg q.i.d.†	50 to 100 mg/kg/day†
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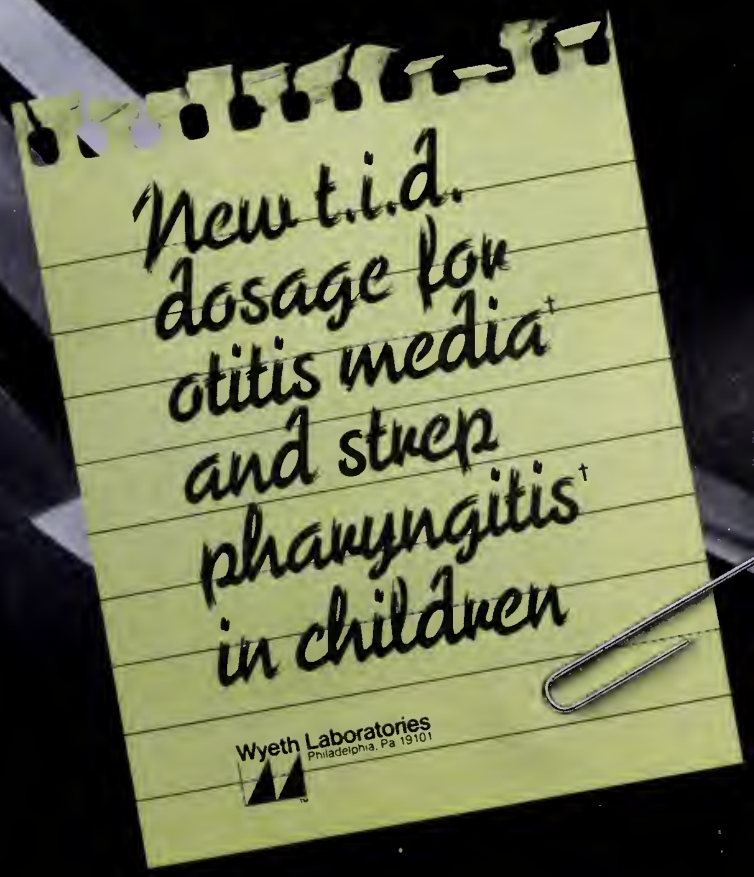

*Rapidly excreted unchanged in urine. Clinical efficacy may not always correlate with blood levels.
†Due to susceptible organisms.
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2. Multicenter trials. Data to be published.
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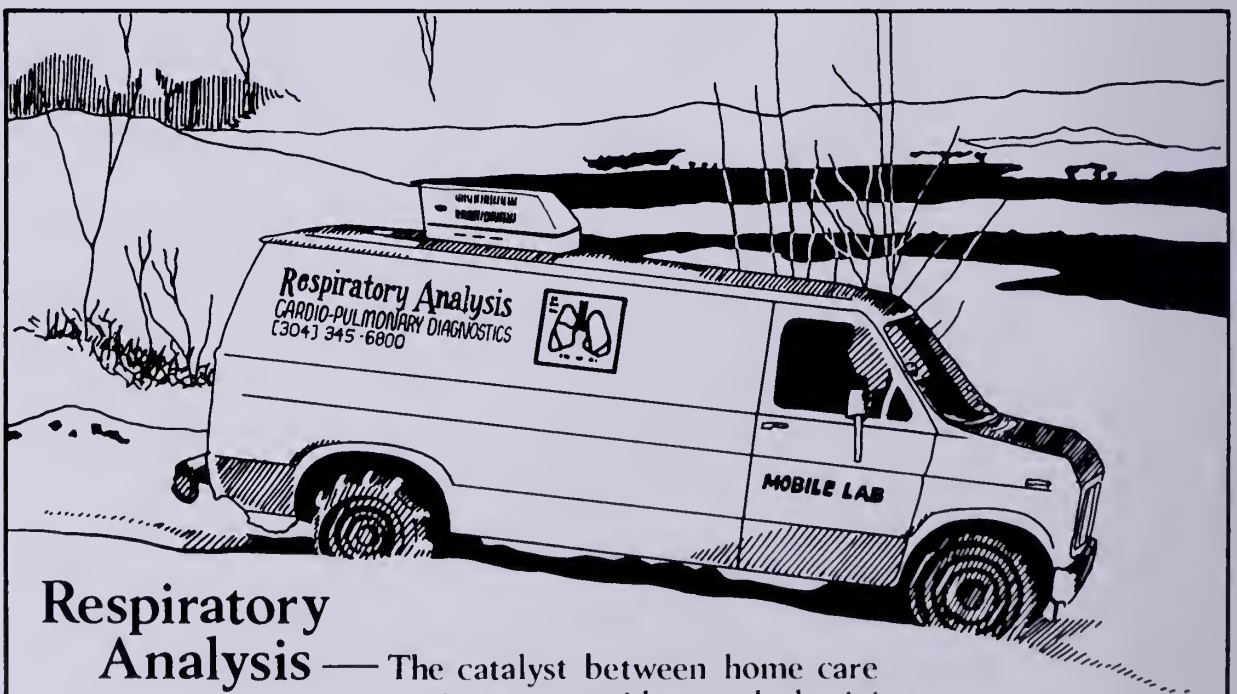

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The West Virginia Medical Journal

Vol. 78, No. 6 June, 1982

Intussusception: Experience In A Community Hospital

RICHARD J. HAAS, M. D.
The Golden Medical Group and Memorial General Hospital, Elkins, West Virginia

Six cases of intussusception which were diagnosed and treated at a community hospital are presented. A brief review of the literature is given regarding the etiology, diagnosis and treatment of intussusception.

In a community hospital of 129 beds, six cases of intussusception were treated over a period of five years. The age range was four months to two and one-half years. During the same period, there were 42 appendectomies performed for appendicitis in children up to 12 years of age. While the incidence of intussusception is less than that of appendicitis, it is not a rare condition. The often ambiguous symptoms of intussusception combined with the urgency of establishing the correct diagnosis make this an especially challenging condition confronting the primary care physician and surgeon.

Case Reports

Case One: A four-month-old child with a history of constant crying for two hours was seen in the emergency room. Two loose stools had been noted but contained no gross blood. On physicial examination the child was very irritable with apparent colic, but was afebrile, and the vital signs were normal. On abdominal examination a mass was palpated in the right periumbilical area. An abdominal radiograph showed absence of gas in the right colon, and a soft tissue density was appreciated in the area of the cecum. Barium enema showed an ileocolic intussusception. Hydrostatic reduction was accomplished with careful abdominal manipulation. Recovery was uneventful.

Case Two: A four-month-old boy was seen in the clinic with a 24-hour history of vomiting, colicky abdominal pain and periods of lethargy. A bloody mucoid stool was passed shortly before the child was brought to the clinic. Physical examination showed a lethargic child with intermittent episodes of discomfort which appeared to be due to abdominal pain. No mass was palpable on abdominal examination, but a pos-

Figure 1. Abdominal radiograph in a patient with ileocolic intussusception demonstrating distended loops of small bowel with absence of gas in the right colon and rectum.

sible mass was appreciated on rectal examination. A typical "currant jelly" stool was passed immediately after rectal examination.

Preliminary abdominal radiographs showed dilated loops of small bowel and absence of gas in the colon (Figure 1). Barium enema revealed ileocolic intussusception which was easily reduced hydrostatically. Recovery was uneventful.

Case Three: An 11-month-old infant was transferred from another hospital with the symptoms of vomiting, fever and lethargy for 24 to 48 hours. The diagnosis of meningitis was suspected. On initial examination the child was lethargic but responsive. The vital signs were normal except for a temperature of 39°C. rectally. The peripheral leukocyte count was 12,000, with a shift to the left. The serum electrolytes were normal as was examination of the cerebral spinal fluid. A preliminary diagnosis of bacterial sepsis was made, and the child was placed on broad spectrum antibiotics.

Forty-eight hours after admission, the child was more lethargic, and abdominal distention was noted. Abdominal radiographs were consistent with small-bowel obstruction. The patient was taken to the operating room for an exploratory laparotomy which revealed an ileo-ileal intussusception. A three-inch gangrenous section of ileum was resected.

The patient improved initially, but on the fourth postoperative day, fever and abdominal distention were noted again. The patient was returned to the operating room where three areas of small-bowel breakdown were found. An ileostomy and colostomy were placed. After a hospitalization of 40 days, the patient was discharged, and the bowel was reanastomosed later.

Ileocolic Intussusception

Case Four: A 16-month-old boy was seen in the clinic with a six-day history of fever and vomiting and colicky abdominal pain occurring after meals. No mucoid or bloody stools had been noted. Physical examination revealed tonsillitis and a distended abdomen. An abdominal radiograph revealed a soft tissue density in the right lower quadrant. Barium enema examination showed an ileocolic intussusception which was easily reduced using hydrostatic technique. He was sent home on penicillin, and recovered uneventfully.

Case Five: A one and one-half-year-old boy was admitted with a 24-hour history of colicky abdominal pain and frequent vomiting. Shortly before admission he had passed a stool containing blood. Physical examination showed an alert child with intermittent abdominal pain. Between episodes of pain, he was playful and did not appear very ill. Abdominal and rectal examination revealed no palpable mass. Barium enema revealed an ileocolic intussusception.

Hydrostatic reduction was attempted but was unsuccessful. The intussusception was reduced operatively with no evidence of bowel infarction. Large lymph nodes were noted in the mesentery of the right colon and small bowel. The patient recovered uneventfully.

Case Six: A two and one-half-year-old girl was seen with a two-day history of intermittent abdominal pain. Between episodes of pain, she was playful and alert. Abdominal examination was unremarkable, and an abdominal radiograph showed a large amount of fecal material in the colon. She was given a saline enema and sent home. She seemed improved initially, but returned eight hours later with recurrence of symptoms. Barium enema showed the coiled spring pattern and soft tissue mass consistent with ileocolic intussusception (Figure 2).

Hydrostatic reduction was not successful, and the patient was taken to the operating room where the intussusception was easily reduced with no evidence of infarction of the bowel. Recovery was without complication.

Figure 2. Spot films taken during barium enema examination in a patient with ileocolic intussusception demonstrating "coiled spring sign" caused by presence of barium between the two intestinal walls at the site of intussusception.

Discussion

Intussusception is defined as the invagination of one part of the intestine into another in the direction of peristalsis. The name is derived from the Latin word *intuss*, meaning "within," and *suscipere*, meaning "to take up."

Intussusception generally is a condition of the infant and younger child. Freund,[1] in Israel, reported 70 per cent of 52 patients to be less than one year of age, with 61 per cent aged three to nine months. Ein,[2] in Toronto, reported 354 cases, of which 57 per cent were under one year of age, with 42 per cent aged three to nine months. A similar age distribution was found in 288 cases reported by Gierup,[3] in Sweden.

Ileocolic is by far the most common form of intussusception, accounting for 90 per cent of cases.[3] Other forms occasionally seen are ileo-ileocolic, ileo-ileal, and colo-colic. In the younger child, intussusception is usually idiopathic, whereas, in the older child, there is a greater chance of it being associated with a leading point. One series found leading points in 12 of 52 cases.[1] The 12 children older than two years accounted for six of these. The leading points consisted of five cases of lymphoid hyperplasia, four of lymphosarcoma, and one each of Meckel's diverticulum, leiomyoma of the bowel, and intestinal polyp.

Figure 3. Soft tissue mass obstructing the flow of barium at the point of ileocolic intussusception.

Ein[4] reported 31 leading points in 569 cases, with Meckel's diverticulum accounting for 14; polyp, eight; duplication of the bowel, five, and one each for Henoch-Schonlein purpura, suture line, appendix, and lymphosarcoma.

The classic triad of symptoms in intussusception are abdominal pain, vomiting and bloody (currant jelly) stools. In Ein's[2] series, 85 per cent of patients complained of abdominal pain, and 80 per cent experienced vomiting. Both abdominal mass and bloody stools were found to be present in 60 per cent of patients. Gierup[3] has found a similar incidence of abdominal pain and vomiting, but found only 16 per cent to have passed blood per rectum. The complete triad of abdominal pain, vomiting, and bloody stools was found in only 11 per cent of cases overall, but in 23 per cent of patients under one year of age.

Pain Not Present

Of particular interest are those cases where pain is not a prominent presenting symptom. Ein[2] and Gierup[3] each found these to constitute approximately 10 per cent of cases. These children are usually sicker, frequently manifesting symptoms of shock. A state of altered consciousness suggesting a primary neurological condition sometimes is seen.[5] This has been hypothesized to be due to toxic metabolic products which have migrated transmurally through the damaged intestinal wall.[6] Lethargy also may reflect altered fluid and electrolyte balance or sepsis. Seizures also have been reported associated with intussusception.[7]

Another variant is the chronic or non-ischemic intussusception, which has been reported to account for 16 per cent of cases.[8] Non-ischemic intussusception often is associated with a lead point, and symptoms may be present for days or weeks.[8-11] Vascular compromise of the intestinal wall is absent and obstruction incomplete; hence, the less acute symptoms. Bloody diarrhea with abdominal pain and vomiting often are the presenting complaints, confusing the diagnosis with that of gastroenteritis.

Hydrostatic reduction with barium enema generally is the treatment of choice for intussusception except when the patient's condition is unstable or when symptoms suggesting perforation or peritonitis are present. In these situations, surgical exploration should be carried out without delay. The indications for attempting hydrostatic reduction are somewhat controversial. Ravitch[12] has suggested that barium enema be avoided when the patient's age suggests a lead point, when the abdominal radiograph suggests

obstruction, when the duration of symptoms suggests bowel infarction, and when perforation is suspected. Others[1,3] consider peritonitis and marked obstruction as the only contraindications. The technique for hydrostatic reduction has been described elsewhere. [3,13]

Successful hydrostatic reduction with barium has been reported in 40 to 90 per cent of cases.[1,2,9,14,15] The different statistics often reflect the different criteria which are used to select which cases will not be attempted with barium.

Probability of Success

The probability of successful hydrostatic reduction is related to the type of intussusception and to the duration of symptoms. Ileo-ileal intussusception generally is not reducible by this means. Freund[1] found that if symptoms have persisted for more than 24 hours, the success rate was 12 per cent, compared with 55 per cent in patients with symptoms for less than 24 hours. Gierup[3] found success in 85 per cent of patients with symptoms for less than 12 hours and 70 per cent in patients with symptoms for more than 48 hours. There did not seem to be any harm in attempting hydrostatic reduction when the duration of symptoms was the only contraindication except that in the unsuccessful cases surgery was delayed.

The incidence of perforation during hydrostatic reduction has been found to be approximately one in 250.[15,16] As noted earlier, leading points are more common in the older child. In general, these are not reducible with barium enema.[4,17] It is unlikely, therefore, that a condition such as an ileal lymphosarcoma will be missed.

Hydrostatic reduction is considered successful if the entire colon is emptied of the intussusception, and several loops of terminal ileum are noted to fill with barium. Incomplete evacuation with residual barium in the small bowel also is considered a sign of successful reduction.[18] Occasionally, a poor ileal reflux is noted and, at surgery, the intussusception is found to be reduced.[9,14] This is a justifiable price to avoid overlooking an incomplete reduction.

The recurrence rate after hydrostatic reduction has been found to be six to 10 per cent.[1,2,15] Earlier recurrences may happen within 48 hours, and late recurrences as long as two and a half years. A child suffering one recurrence has been found to be a risk for still another.[15] Often, a second or third successful hydrostatic reduction can be accomplished.[1] A recurrence of an initially-reduced intussusception is not necessarily an indication for surgery, nor does it imply a high probability of a leading point.[15,17,19]

Summary

Six cases of intussusception illustrating both classical and unusual presentations were treated successfully during a period of five years. Three cases were easily reduced using the hydrostatic technique. Two cases were easily managed surgically, and one case presented significant complications. The primary challenge with intussusception is establishing the correct diagnosis as soon as possible since a delay of even 12 to 24 hours may affect the prognosis significantly.

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Biofeedback Therapy—Is It For Your Patient?

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Biofeedback therapy is a relatively recent development. There are many clinics all over the country; however, many physicians remain somewhat unaware of the many clinical uses for biofeedback. Many lay magazines feature articles about stress, anxiety and tension, and discuss biofeedback therapy as a new and effective means of treatment.

We have received several self-referrals as well as referrals from physicians who stated that the patient read about it and wanted to try it. This article is an attempt to help make physicians more aware of what biofeedback is all about.

BIOFEEDBACK therapy involves the use of instrumentation in the treatment of a number of stress-related and psychophysiological symptoms as well as for general relaxation and muscle rehabilitation. It provides the subject with information about his performance that usually is unavailable to him or, if available, usually only in an inaccurate or less clear form. Giving a person immediate information about his own biological conditions, such as muscle tension, brain wave activity, heart rate, skin surface temperature, and galvanic skin response allows that person to become an active participant in the process of health maintenance.

Biofeedback today is very different from what it was many years ago. It has resulted from bringing together information from many widely separated sources. Jacobson[1] developed relaxation training, which used crude electromyographic instrumentation to monitor the level of muscle tension in his subjects in the 1920s and 1930s. Autogenic training, a technique developed by Schultz in Germany, was popularized in the late 1960s by Luthe.[2] This did not require the use of specific equipment, but represented the early application of much of current biofeedback technology.

It was shown by Adrian and Bronk,[3] in 1929, that electrical responses in individual muscles provided accurate reflections of the functional activity of those muscles. It was in 1960 that Marinacci and Horande[4] did research showing the effectiveness of allowing subjects to see the EMG in an attempt to restore use in various neurological conditions. Reports of research involving automatic functions and associated concepts of biofeedback were made in 1961 by Razran.[5]

During the early 1970s, biofeedback underwent drastic changes. The monitoring of alpha brain waves in biofeedback, most popular in the 1960s, was no longer considered a scientifically defensible clinical tool, although it still is used by a few biofeedback clinicians and researchers. The major clinical tools used in biofeedback today are temperature and/or peripheral blood flow control of the extremities, and myoelectric biofeedback.

Typical Biofeedback Set-Up

A description of the typical biofeedback set-up (see Figure) follows:

> The signal transducer receives information from the patient and converts it into a form which is measurable by instruments. The signal booster or amplifier expands this electrical signal into a manageable quantity. The signal processor extracts the wanted part of the information in the signal and filters out or discards the rest. The display then converts the energy of the reduced signal into a particular stimulus or variable sensation that is made available to the patient, i.e., light or sound. The patient completes the feedback loop, producing the original signals, perceiving the feedback, and reacting to the feedback.

Two types of biofeedback are electromyographic (EMG) biofeedback and thermal bio-

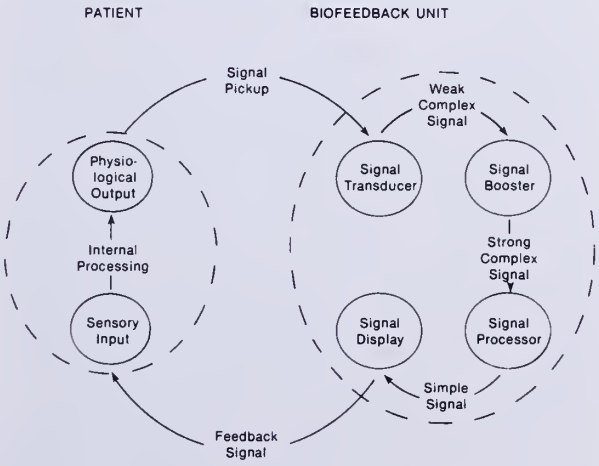

Figure. Typical biofeedback set-up.

feedback. In EMG biofeedback, muscular activity is picked up by electrodes placed on the skin surface. Small voltage charges are recorded as motor units fire. It is not surprising that patients learn control of muscle activity with biofeedback since the skeletal muscle system is under voluntary control; however, what is surprising is the degree to which this control can be learned. Numerous studies have shown biofeedback training to be quite useful in treating many different types of disorders including anxiety,[6] tension headaches,[7,8] muscle spasms and tics,[9] spasmodic torticollis,[10,11] blepharospasm,[11,12] essential hypertension,[13,14] and muscle reeducation.[15]

Other illnesses and disabilities that have been treated successfully include nerve injuries, temporomandibular joint pain, bruxism, subvocalization, stuttering, fecal and urinary incontinence, asthma, insomnia, phobias, and cerebral palsy.

Thermal Biofeedback

In thermal biofeedback, temperature training involves helping the patient learn to regulate blood flow in the periphery, generally the hands and/or feet—but it's much more than that. The peripheral vascular system has no significant parasympathetic innervation. The sympathetic nervous system causes contraction of the smooth muscles in blood vessel walls which results in vasoconstriction. Temperature increase in the hands occurs with increased blood flow which results when the blood vessels dilate because of a decrease in sympathetic activity. This mechanism is controlled by the hypothalamus. Therefore, in learning to warm the hands we can infer that the patient is training his hypothalamus and associated mechanisms. The patient is trying to achieve a normalization of hypothalamic homeostasis.

Many studies utilizing temperature biofeedback have been reported. Some of the disorders successfully treated include migraine headaches[16,17,18] and Raynaud's disease.[19,20] Essential hypertension also has been treated successfully utilizing thermal biofeedback.

Autogenic training[2] often is incorporated in the treatment. The central focus of autogenic training exercises is teaching the individual to shift readily into a relaxed, low-arousal condition. More rapid learning and benefit for some disorders are seen when this is combined with biofeedback training.

Stress-induced states of increased physiological arousal (psychosomatic illness) usually indicate the use (and also abuse) of minor tranquilizers and other similar medications in an attempt to control stress-mediated psychosomatic symptoms. Their use may result in temporary alleviation of the physiological smptoms; however, this practice can cause harmful effects. Continued use can lead to adverse effects. Long-term improvement of physiological symptomatology can occur only if the patient is made aware of his role in the interplay between his thoughts and the pathologic functioning of his body. Biofeedback training can help accomplish this. Quite often the individual is able to modify or reverse his thoughts and attitudes so that he becomes more sensitive to his body's warning signals. He can then deal appropriately with these signals before they result in physiological dysfunction.

There are many patients who could benefit from psychotherapy, but who either adamantly refuse to consider seeing a "shrink" or subtly abort efforts to move them in this direction. It has been estimated that 50-70 per cent of all presenting complaints in a general, medical or gynecological practice either are etiologically based or exacerbated by stress and emotional problems.[21] Biofeedback provides some of these patients with the therapy they need. Patients can much more easily allow themselves to participate in a treatment program that has a medical orientation while becoming enthusiastic about learning to control some aspect of their physiology that is dysfunctional. Such a program allows the patient to get to know the therapist and, if psychotherapy is still indicated, that relationship may encourage him toward psychotherapy.

Non-Psychosomatic

Non-psychosomatic problems such as torticollis, stuttering, fecal incontinence, tendon transfers, pain, and Raynaud's disease also are included here. These are problems that have no clear-cut, effective medical or surgical treatment. Biofeedback is a relatively innocuous, non-invasive technique that, if properly used, can result in significant improvement in many such problems. The Raynaud's patient can learn to keep his hands warmer and decrease attacks; the pain patient can learn more about himself and the emotional, cognitive and social factors that influence his perception of pain and improve his control of it; the stutterer can learn to relax appropriate musculature prior to speaking; and the stroke patient can learn that a limb or foot is not completely paralyzed, and can learn to strengthen the muscles necessary to restore function.

While studies of volitional disorders to provide convincing evidence have not been done, it seems reasonable to expect that biofeedback training could be of some benefit in the treatment of disorders such as obesity, smoking, drug abuse, and the abuse of caffeine-containing substances such as coffee and colas. Anxiety usually plays a major underlying role in many such disorders. Often there is a feeling of emptiness and/or inadequacy. Many treatment programs have not adequately provided appropriate substitutions so that often the patient will return to the habit.

Biofeedback in these cases can be beneficial. In addition to helping provide relaxation and peace of mind as a substitute, successful training helps the patient realize he is gaining control. He feels less powerless, less hopeless and less helpless. He begins to develop a sense of accomplishment and confidence in himself and his abilities. Often psychotherapy may be necessary to help deal with the social, family or vocational problems. After a positive experience with biofeedback training, patients often are quite willing to accept this.

Contraindications

There is no evidence to show that biofeedback has helped to relieve manic episodes. In the schizophrenic, it may result in paranoid symptoms that distort perception. The interaction with the instrument can be incorporated into a delusion; a deepened state of relaxation can result in a worsening of symptoms. Another contraindication is (the individual with) a history of pathologic dissociative reactions: biofeedback may bring on such a state.

Medically, it is necessary to follow those individuals who are receiving drugs concomitantly with biofeedback training. The diabetic who learns to become more relaxed may reduce his insulin requirement. Likewise, the hypertensive's blood pressure may drop to lower than normal levels if his medication is not reduced as his ability to relax improves. It goes without saying that in most instances a medical evaluation is necessary prior to instituting biofeedback training.

Summary

When biofeedback training first became popular in the 1960s and 1970s, it was promoted by the lay magazines and some professionals as the panacea for most, if not all, of man's illnesses. This proved to be untrue; however, since that time, biofeedback has proved to be effective in the treatment of some problems and disorders. Research continues in efforts to determine its usefulness in other disorders. It will be several years before the full impact of biofeedback is known.

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Medical Grand Rounds

From the West Virginia University Medical Center

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Occupational Asthma

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Occupational asthma is being recognized more frequently as a cause of airways disease in adults. Symptoms can be triggered by a variety of chemical substances as well as the more classical animal and vegetable protein antigens. Immunologic mechanisms are felt to be the most common; however, bronchospasm due to vagal reflex, airway inflammation, and pharmacologic mechanisms are described.

Several clinical patterns of occupational asthma including immediate, delayed, and nocturnal attacks are recognized. A controlled inhalation challenge with the suspected causative agent should be performed if the diagnosis is in doubt. Pharmacologic therapy is usually unsatisfactory. The patient generally will become asymptomatic if exposure to the offending substance can be eliminated.

"THOSE who separate the flour from the bran, however they may protect their faces, cannot help taking in floating particles of flour with the air they breathe; these ferment in the salivary juice and stuff up, not only the throat, but the stomach and lungs with a sort of paste, which makes them liable to coughs, short of breath, hoarse, and finally asthmatic."—Bernardino Ramazzini, *Diseases of Workers*, 1713.

Since the time of Ramazzini, occupational airways disease has become widely recognized as an important cause of morbidity in the working population. Occupational airways disease comprises a large group of disorders which results in symptoms, such as cough and chronic bronchitis, as well as fixed and variable obstruction to airflow in the lung. This discussion will be limited to occupational asthma, the group of disorders characterized, at least initially, by increased responsiveness of the trachea and bronchi to various stimuli, and manifested by a widespread narrowing of the airways that changes in severity either spontaneously or as a result of therapy (American Thoracic Society definition of asthma).[1]

The "stimuli" must be substances to which the patient has been exposed directly, or are present incidentally, at the worksite. In general, previous sensitization to nonoccupational agents should not be present for a diagnosis of occupational asthma to be made with confidence.[2] The reported incidence of occupational asthma varies with each region's economic patterns as well as the familiarity of the medical community with the problem. Two per cent of all asthmatics in the United States are diagnosed as having occupational asthma, whereas, in Japan, the figure is 15 per cent.

Among animal handlers, approximately six per cent develop wheezes, whereas in industries using complex salts of platinum virtually 100 per cent of workers develop some respiratory symptoms.[2,3] Emissions from neighboring industries have been implicated in respiratory sensitization of workers and residents in several communities.[4]

A recent case at the West Virginia University Hospital, Pulmonary Clinic, illustrates many of the important features of occupational asthma:

A 59-year-old male truck driver presented to the pulmonary clinic with a history of daily cough and sputum production for three years, associated with intermittent chest tightness occurring particularly at night. He is a former smoker, having smoked for 40 years, two packs of cigarettes a day, but quit approximately two years ago. For the past 10 years he has worked as a truck driver, and for the past three years has hauled various chemicals in a tank truck, including toluene diisocyanate (TDI).

Shortly after he started this work, a spill of the material occurred while it was being unloaded. Four to five hours after the spill, the patient noticed severe dyspnea and wheezes and was hospitalized and treated for status asthmaticus. Since that time he has noted intermittent symptoms as above. The patient has no prior history of wheezes, and there is no family history of atopic disorders.

Spirometry revealed mild obstruction without improvement with bronchodilators. The diffusing capacity was minimally impaired. Chest x-ray revealed mild increased interstitial markings. A TDI challenge showed a biphasic response with decreases in flow rates during the first 15 minutes which resolved after one hour, and a drop again at three and one half to four and one half hours (Figure).

The range of job categories at risk for occupational asthma has broadened considerably in recent years (Table 1). Highly reactive low-molecular-weight compounds such as toluene diisocyanate and phthalic anhydride, used in a variety of chemical processes, paints and plastics, are replacing the more classical protein antigens such as grain dust, milled flour, and animal hairs and dander as the most commonly implicated agents.

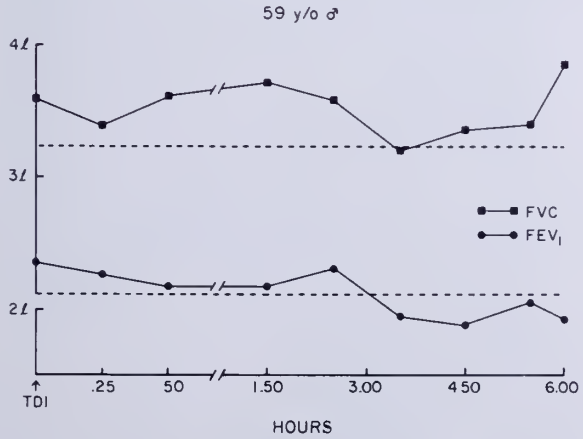

Figure. Inhalation challenge with TDI in a patient with isocyanate asthma.

The airborne substances which result in occupational asthma can, in general, be classified into four distinct etiologic and clinical groupings (Table 2). Several compounds, however, may act by more than one mechanism:[5]

Reflex Mechanisms: Agents in this category generally are non-specific irritants. They often are particulates or are water soluble, and thus are deposited proximally in the respiratory tract. They cause a direct irritation to the upper air-

TABLE 1
Workers at Risk for Occupational Asthma

Occupation	*Suspect Agent*
Animal handlers	Dander, mites, molds, antibiotics
Bakers	Flour dust, fungi, mites
Beekeepers	Emanations of insects
Chemical workers	Formalin, isocyanates
Coffee workers	Green coffee dust
Cotton, hemp and flax workers	Cotton, hemp, flax dust
Detergent industry workers	Proteolytic enzymes
Domestics and housewives	Proteolytic enzymes, house mites
Electricians	Aminoethylethanolamine from soldering
Entomologists	Emanations from insects
Farmers	Animal dander, grain dust
Feather workers	Unclean feathers
Grain workers	Grain weevil and mite, grain dust
Hairdressers	Powders and sprays
Insecticide users	Parathion
Laundry workers	Alkaline proteases
Meat wrappers	Fumes from polyvinyl chloride
Millers	Flour dust
Mushroom workers	Molds
Metal and ore workers	Metal salts
Oyster workers	Crushed oyster shells
Painters	Isocyanates
Pharmacists	Penicillin
Photographers	Photography paper containing potassium chloroplatinate
Plastic workers	Isocyanates, anhydrides
Printers	Gum arabic
Soybean workers	Dusts from grinding soybeans
Tea makers	Tea fluff
Textile workers	Textile fibers
Tobacco workers	Tobacco dusts
Welders	Acetylene welding, metal fumes
Wood workers	Plicatic acid in red cedar

TABLE 2
Occupational Asthma: General Classification

1. Reflex Bronchoconstriction.
2. Pharmacologic Bronchoconstriction.
3. Acute Inflammatory Bronchoconstriction.
4. Allergic Bronchoconstriction.

ways and nasopharynx.[6] Bronchoconstriction is mediated by a vagal reflex mechanism, and can be blocked with atropine. Symptoms arise shortly after exposure and require no prior sensitization or latency. All exposed workers may develop symptoms, although at differing levels of the environmental agents. Examples of such irritants include gases such as sulfur oxides, and metal fumes. Many of the substances in this group, if suspended as small particles or in high concentrations, may have a toxic effect on the lower respiratory tract (see below).

Pharmacologic Mechanisms: Bronchoconstriction is caused, by agents in this group, through a direct effect on the mediators of airway smooth muscle action. Examples include the organophosphorus insecticides, which block the cholinesterase enzyme. This causes an increase in cholinergic transmitters, and subsequent bronchoconstriction.[3] Isocyanates have been shown *in vitro* to cause a block of beta adrenergic-mediated increase in cyclic AMP.[7] However, the importance of this finding in the clinical situation is not clear.

Vegetable Dusts

The most important agents in this group are the vegetable dusts such as cotton, flax and hemp.[8,9] They cause the typical symptoms of byssinosis, a generic term applied to acute and chronic airways disease among those who process these fibers. The specific etiologic agent or agents responsible for these diseases have not been identified. However, a water-soluble factor found in the leafy bract of the cotton plant has been shown to reproduce the symptoms and physiologic changes of byssinosis when inhaled as an aerosol.

The typical clinical history is that of chest tightness and shortness of breath, with or without wheezes and cough, on the first day back to work after several days away (so-called "Monday asthma"). Many workers also demonstrate a measurable fall in expiratory flow rates over the work shift. In later stages, symptoms occur on other days of the week as well, eventually resulting in chronic breathlessness and ventilatory impairment.

As with the non-specific irritants, virtually all individuals are susceptible if the environmental dust levels are sufficiently great. The prevalence of the condition varies with the dust level, the particular fiber being processed, and the operation involved. For example, workers involved in carding have a much higher prevalence than those involved in spinning or weaving. In general, smokers appear to be more severely and rapidly affected than non-smokers. No prior sensitization nor latency is recognized in this group of disorders: symptoms can be seen on the first exposure to the agent.

Inflammatory Mechanisms

Inflammatory Mechanisms: Many airborne substances can cause a direct toxic injury to the respiratory epithelium. This results in a recruitment of inflammatory cells, edema of the mucosa, and direct smooth muscle bronchoconstriction.

It has been suggested that these agents cause a general increase in the permeability of the mucous membranes of the airways. This results in increased non-specific airways irritability (to exercise and cold air) as well as allowing penetration of other compounds which have potential for immunologic sensitization.[5] Several of the compounds in this group, for example, formalin, isocyanates and acid anhydrides, act as haptens and immunologic sensitizers in addition to their direct irritant effects.

Allergic Mechanisms: Two large classes of compounds can cause allergic bronchoconstriction (Table 3). Large-molecular-weight antigens, generally proteins, frequently are dispersed in dusts and aerosols from animal or vegetable material. Specific immunoglobulin responses often can be identified using the radioallergosorbent tests (RAST), or serum (IgG) precipitins. Due to the difficulty in identifying a specific antigenic determinant, these tests may be falsely negative; in addition, false positives can occur

TABLE 3

Allergic Bronchoconstriction

Large-molecular-weight antigens:

- —Dispersed aerosols and dusts of animal and/or vegetable origin.
- —IgE, IgG, possible CMI (Skin tests, serum precipitins, or RAST tests positive in many but not all cases, false positives occur).
- —Atopics at higher risk.
- —Examples: Bakers asthma
  Grain workers
  Enzyme detergent workers

Small-molecular-weight (<1000 m.w.) sensitizers

- —May act as haptens with serum proteins.
- —Immunologic aspect more difficult to demonstrate.
- —Smokers at higher risk.
- —Often also primary irritants.
- —Examples: Isocyanates
  Acid anhydrides
  Formalin
  Antibiotics
  Western Red Cedar
  Platinum Salts

in individuals who are exposed but not symptomatic. Thus, although they may be helpful, immunologic tests cannot be relied upon for a definite diagnosis.

Individuals with atopic backgrounds may be at higher risk for development of symptoms, particularly among detergent enzyme workers, but most cases are in nonatopics. Other occupations at risk include bakers, grain workers and certain groups of wood workers.

The other group of compounds that may be implicated in allergic bronchoconstriction is low-molecular-weight substances (molecular weight less than 1,000) which may act as haptens with human proteins. Because these compounds are extremely chemically reactive, and may bind at various sites to numerous proteins, it has been difficult to demonstrate a specific antibody to these agents in affected individuals. As mentioned previously, the primary irritative effect of many of these compounds may potentiate their ability to sensitize an individual.

It is common for a patient to date the onset of recurrent attacks of wheezing to a high-level exposure, for example, a spill of formalin or isocyanates. After the initial episode, lower levels of exposure reproduce the symptoms. Examples of these low-molecular-weight sensitizers include the isocyanates, the acid anhydrides, certain antibiotics, and plicatic acid, found in Western Red Cedar wood dust.

Isocyanate Asthma

Isocyanate asthma represents a typical example of the spectrum of clinical findings in the occupational asthmas. It is reported in 5-10 per cent of exposed workers. There frequently is a latency period between the onset of exposure and the onset of symptoms. This may range from less than one to two years in the majority of cases, to over 20 years.[11] The initial sensitization frequently is dose dependent. Thus, although the Occupational Safety and Health Administration's Threshhold Limit Value (TLV) for airborne isocyanates is 0.02 parts per million, workers who have become sensitized frequently will develop wheezing and chest tightness at airborne concentrations of one tenth or one twentieth of that level.[12]

Symptoms at first may be confined to rhinitis and conjunctivitis. After a variable period of time, depending on the level of exposure, a chest tightness, cough, and shortness of breath develop in the afternoon and evening of the working day. Because of this delay, the individual may not associate his work with the symptoms, and may ascribe them to age or cigarette smoking. These symptoms may improve on weekends and holidays. Later, the worker notes immediate cough, wheezing and chest tightness upon entering the workplace. Eventually, cough and breathlessness become chronic.

A third pattern of occupational asthma is the nocturnal attack, which begins approximately 18 hours after exposure and frequently awakens the patient at night. At times, a single exposure may result in repeated nocturnal attacks on subsequent nights.[13] Due to the prolonged nature of the bronchoconstriction, spirometry frequently shows a mild or moderate obstructive impairment *without* reversibility with inhaled bronchodilators. In fact, since the effect may last more than 24 hours testing peak flow or spirometry before entering and after leaving the workplace may be misleading. The residual bronchospasm from the previous day still may be present prior to work and actually improve during the workshift.

There is usually (in 90-100 per cent of symptomatic cases) evidence of increased nonspecific airway reactivity to methacholine and histamine.[14] Progression to irreversible respiratory impairment is an ongoing concern, and has been well demonstrated in cotton industry workers.[15] It has been reported in workers exposed to other occupational agents as well.[16]

Discussion

Occupational asthma should be suspected when a patient presents with a history of adult onset asthma in which a typical atopic or family history is absent. The patient may relate improvement on holidays or weekends, at least initially. If a thorough occupational history does not reveal exposure to a known causative agent, it often is helpful to speak to supervisory personnel at the workplace.

Laboratory data may reveal eosinophilia, and precipitins, skin tests or RAST may be useful in increasing the probability of the diagnosis of occupational asthma, although none of these tests is entirely reliable. Spirometry may reveal an obstructive pattern with or without reversibility with inhaled bronchodilators, or may be entirely normal. Increased non-specific airway reactivity to methacholine or histamine is usually present. This reactivity returns toward normal in the majority of affected workers after six to 12 months, although up to 21 per cent of workers have been shown to have persistent asthma after the exposure is terminated.

A controlled inhalation challenge with the suspected causative agent should be performed if the diagnosis is in doubt, if the agent is not recognized previously to cause occupational asthma, or if removal from the workplace creates economic hardship for the patient.

The essential element in management is elimination of the exposure. Discussions with the employer may reveal an opportunity for transfer of the worker to an unexposed area, or may suggest that airborne concentrations of the substance are above those recommended. In this instance, the physician has a unique responsibility to protect the health of other employees. Industrial hygiene measures may benefit all exposed persons. In general, masks and respiratory protective devices are not effective methods for preventing symptoms since minute quantities of these agents can elicit a response.

In unusual situations, drug therapy may be attempted, although it generally is not as effective as in asthma from non-occupational causes. Cromolyn sodium may diminish both the acute and delayed airway responses, but systemic and inhaled steroids are effective only in the delayed reactions. Sympathomimetics are partially effective, particularly in the early reactions.

Major Obstacle

Pre-employment screening for atopy is unlikely to reduce the incidence of occupational asthma except in exposures to detergent enzymes and complex platinum salts. However, it must be emphasized that the major obstacle in management of occupational asthma is the initial diagnosis and identification of the offending substance. It has been stated that "the investigation of allergic problems required the inquisitiveness of a Sherlock Holmes, the genius of Thomas Edison, the patience of Diogenes, and the optimism of an idiot!" Occupational asthma is one of the few areas in medicine where once the physician has reached a diagnosis, his therapy (termination of exposure) can usually be entirely curative.

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115th ANNUAL MEETING

of the

West Virginia State Medical Association

The Greenbrier

AUGUST 26-28, 1982

PLAN NOW TO ATTEND

A message from . . .

The President

THERE COULD GO I

As I have traveled the state visiting the various component societies, I have been approached on several occasions about a matter that is very difficult for all of us. I have been asked by several of our members throughout the state: What do we do about the impaired physician?

As much as we would like never to face a problem such as this, there is no doubt that it does exist. As we all know from studies across the nation, physicians are just as prone to impairment as any one else—in many cases more so.

Our profession is a very demanding one. It is demanding as to time. This in itself is very stressful. Beyond this, however, our professional activities are psychologically very demanding and stressful. Being as human as everyone else, and in spite of our training and education, we fall prey to impairment. Impairment due to alcoholism and drug abuse is becoming more and more prevalent among physicians because of those stresses and strains of our practice. Physical impairment is close behind.

Alcoholism is self-explanatory; as physicians we are no different than others who succumb to this problem. Drug abuse, because of our easy access to same, is just as much a problem. Each of the above is difficult enough to deal with when it involves a colleague, but there is a great deal of initial reluctance on our part to recognize such a problem not only in ourselves, but in others.

Physical impairment, inability or incompetence is the most difficult one for any of us because we all appreciate the possibility that "it could be me." As unpleasant as impairment is from whatever cause, it is something of which we must be acutely aware. There are two reasons we must be aware. The first, of course, is to do our best to help a colleague overcome the problem when we become aware that he or she has one, both through prevention and by insisting on cure. An equally important reason is to protect the public we serve.

The degree, Doctor of Medicine, signifies to all that the holder thereof is a trained, competent individual able to handle directly or by referral any problem a patient has. It is incumbent upon us to preserve this standard of quality and reliability. Our oath states that we are, in effect, our brother's keeper and the keeper of the faith as far as the public is concerned. Our course is clear. We must do all we can to prevent a colleague from falling prey to an abuse problem. If it has happened, we must make every effort to rehabilitate that colleague.

The problem of incompetence, physical or mental impairment and inadequacy, although more difficult, must be handled in a similar fashion. Any impairment whether abuse or incapacity from whatever cause usually implies possible loss of practice privileges in hospital settings. It is therefore very important that the medical staff bylaws and constitutions in hospitals speak specifically to these problems so that they can be handled in a fashion that the physician as well as the patient he serves is protected.

If we are willing to resolve the problem of physician impairment, which we must, then we truly fulfill our charge to protect the public's welfare. We can do no less.

John B. Markey

John B. Markey, M. D., *President*
West Virginia State Medical Association

The West Virginia Medical Journal

Editorials

The Publication Committee is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author shall be held entirely responsible. Editorials printed in The Journal do not necessarily reflect the official position of the West Virginia State Medical Association.

State Medical Association executives, with Harlan R. Knudson of the State of Washington the catalyst, have been taking a detailed look at marketing. Specifically, the discussion has centered about how the medical delivery system across the country is changing; what is bringing about those changes, and how marketing might be a tool to help state medical associations in better meeting member needs.

CRITICAL ISSUES

A part of the effort has involved an identification of the present-day issues impacting the delivery of medical care. Just a partial listing put together for initial discussion provides fuel for some sober and concerned thought. Here are items on the list:

An oversupply of physicians (in at least some areas); a demand for less costly care; competition from non-physicians providing medical care; competition from a variety of prepaid plans, HMOs, IPAs, Blue Shield and other entrepreneurs.

Competition among specialties; a public-perceived demand for wellness programs and preventive care; competition from nonprofit and proprietary hospitals, large clinics, business and insurance company HMOs and IPAs; over-regulation by state and federal government.

Inadequate reimbursement for state and federal medical programs; inadequate, unrealistic planning for delivery of medical services; increasing third-party (insurance, foundations for medical care, etc.) utilization and fee review.

Inadequate medical disciplinary systems; inadequate grievance programs; inadequate programs for physicians with personal problems; inability to identify and respond to patient or purchaser (employer) medical needs and wants, and poor public image.

There obviously is a significant number of additional issues, or those that take on a more specific nature. A continued, many-faceted study of hospital care costs in West Virginia is an example, without—as we have addressed in a previous editorial—proper legislative attention to funding a method to get some highly critical data necessary to identify just what situation and/or problem might exist.

How well are some of the issues set forth above really being addressed? In too many instances, much, much still needs to be done.

In particular, far more effective medical disciplinary systems have to be implemented, as do programs for impaired physicians. In West Virginia and elsewhere, such necessary bases as potentially effective state medical practice acts are in place upon which such implementation can be built. The public welfare is paramount here, and attention to these items represents a critical need.

QUESTIONS AHEAD

Two acts of the 1982 Legislature, which went on the books after overrides of gubernatorial vetoes, are certain to provide some interesting questions down the road for health, and health-related, programs.

One (Senate Bill No. 22) gives the Legislature broad authority to say where a good portion of federal matching monies will be placed. The measure also carries authority for discontinuing certain programs if federal monies are discontinued; and requires the Governor to get approval of a between-sessions joint House-Senate committee to enter into a state-federal matching program.

The act promises to touch off executive-legislative clashes when federal policies direct block-grant money to the state for health, welfare and other programs to fund services now financed in large measure by the Federal Government.

Such grants ultimately will be discontinued for certain programs, it is presumed, with states faced with decisions as to whether services are vital enough to merit continuance with state funds—if, in fact, that money actually can be found by the Legislature. Governor Rockefeller said in his veto message that Senate Bill No. 22 would require him to go "hat-in-hand" to the Legislature on behalf of programs and services.

In another enactment (House Bill No. 1432), the Legislature generally restored to itself rule-making review authority which it exercised under an earlier law until the State Supreme Court threw the statute out as a violation of constitutional separation of executive, legislative and judicial powers.

The Court said, among other things, that the Legislature could not reject in whole or in part rules and regulations promulgated by an executive agency of government unless it did so by legislative act. House Bill No. 1432 is designed to overcome that objection, and requires introduction of bills each year to effect action on rules and regulations reviewed between sessions by a House-Senate Committee.

Exactly how the new act will be implemented is far from clear. Will the approach be individual bills relative to rules and regulations proposed by individual agencies—or will the approach be an omnibus type of measure—such as the bill annually grouping together claims against the state recommended by the State Court of Claims —listing all of the rules and regulations in a single measure?

The new legislation simply says that a bill or bills will be introduced—so apparently such measures will go the usual route of being subject to amendment in committee and/or on the floor.

There also are some provisions for the interim committee to decide that rules might be promulgated on an emergency basis, prior to any legislative enactment. How that, as well as other action under the legislation in general, might shake down will be interesting to watch.

Again, however, many of the rules and regulations proposed—and approved or rejected, in whole or in part—will deal with health care, licensing, disciplining of health professionals and the like. So we have, in essence, another process that will have to be watched in close detail. And another example of something new under the sun.

WHY BELONG?

Members of organizations such as the State Medical Association will, on occasion, ask those in Council or other leadership roles just what the outfit is doing for them. Some Association officers have found those questions frustrating.

Don't those members read *The Journal*, legislative bulletins and other material they receive? Don't they participate in local medical society activities? Aren't they aware of Association-endorsed packages of insurance programs; of continuing medical education programs, and of a variety of other services the Association provides?

An executive of a trade association observed recently that, actually, the best thing that can happen to any such organization is to have a member take the time to ask himself or herself, "Why am I a dues-paying member?" Then the exec set out to provide some of the answers such a member should provide from his or her own thinking. Here are some of those answers, paraphrased to fit a medical association format:

—I owe it to myself, my patients and my profession to help Medicine move forward at local, state and national levels.

—It takes strength in numbers and concerted action (such as through organized Medicine) to accomplish anything worthwhile, because more can be done collectively than individually.

—Only through membership in "my" association can I obtain the publications, journals, reports and other information prepared with my professional needs in mind. Other things available generally are of a broader nature aimed at a wider audience, and are diluted.

—Regular meetings, annual conventions and conferences I attend provide ideas, knowledge and information obtainable in no other way, and such things have been put to the test of experience before they are passed on.

—I have many true professional and personal friends among the association membership, people I enjoy being with for friendship's sake as well as for professional reasons, and life thus is richer and more worthwhile through belonging.

—Committee projects and other association activities enable me to contribute—to do my bit for Medicine, and work toward the well-being of my patients.

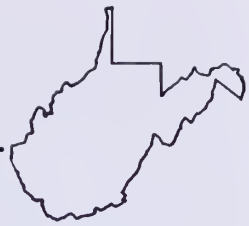
—The cost of belonging is small compared with what I get in return—extremely low "rent" for the space I occupy in the profession.

—Even when other problems command my full attention, the officers and staff of the association keep working in my interest; and maintaining my membership is a vote of confidence in them, which they deserve and which I'm happy to bestow.

—Answers like these ultimately can lead to a better, more effective organization, with more member enthusiasm and participation—and more benefits in the general area of patient care.

—And now the proverbial "bottom line." Taking your membership for granted is bad for you, and even worse for the association.

GENERAL NEWS



Disorders Of Eye, Mouth Convention Subjects

Glaucoma, oral pre-cancer and visual acuity will be among subjects discussed during the Friday morning, August 27, general session of the State Medical Association's 115th Annual Meeting.

The papers will be presented by two ophthalmologists and an oral pathologist during a "Symposium on Common Disorders of the Eye, Ear and Mouth." Completing the symposium will be a fourth speaker who, as announced previously, will lecture on dizziness.

The convention will be held August 26-28 at the Greenbrier in White Sulphur Springs.

The three speakers and their topics currently being announced by the Program Committee for the Friday morning symposium are Larry Schwab, M. D., Assistant Professor, Department of Ophthalmology, West Virginia University School of Medicine, "Medical Therapy of Glaucoma;" J. E. Bouquot, D.D.S., M.S.D., Chairman, Department of Oral Pathology, WVU School of Dentistry, "The Elusive Oral Pre-Cancer;" and Theodore P. Werblin, M. D., Ph.D., Director, Corneal Research, The Blaydes Foundation, Bluefield, "Abnormalities in Visual Acuity and Their Treatment." Doctor Werblin, who is Clinical Assistant Professor of Ophthalmology at WVU, the University of North Carolina and Louisiana State University, also will serve as moderator for the symposium.

Larry Schwab, M. D.

The previously-announced symposium speaker, Malcolm D. Graham, M. D., will discuss "Dizziness: Current Thoughts on Diagnosis and Management." Doctor Graham is Professor and Vice Chairman of the Department of Otorhinolaryngology at the University of Michigan.

The Annual Meeting will open with a pre-convention session of the Association's Council and the first session of the House of Delegates on Thursday morning and afternoon; and end with the second and final House session and reception for new Association officers on Saturday afternoon and evening.

The second, and final, scientific session will be held Saturday morning, with opening convention exercises to precede the Friday morning session.

Subjects for the Saturday morning session will be plastic surgery, urology, knee surgery and neurosurgery.

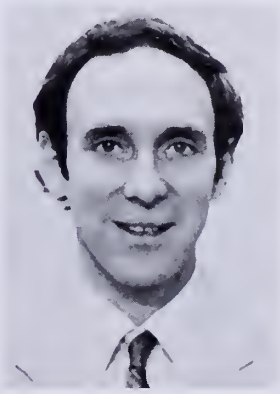
Affiliated societies and about a dozen sections of the Association will have business and scientific sessions on Friday and Saturday, primarily in the form of breakfast and luncheon meetings.

Dr. Harry Shannon of Parkersburg, during the second House session on Saturday, will be inaugurated as President to succeed Dr. John B. Markey of Charleston.

With an interruption in 1975-76 to serve as WVU Assistant Professor of Ophthalmology, Doctor Schwab practiced in Africa for seven years. He was a lecturer in ophthalmology at the Haile Selassie Medical Foundation in Addis Ababa, Ethiopia, from 1972 to 1975 and, from 1976 to 1980, ophthalmologist for Rift Valley Province, Kenya Ministry of Health, Nakuru, Kenya; and Assistant Project Director, Kenya Rural Blindness Prevention Project, International Eye Foundation.

(continued on next page)

J. E. Bouquot, D.D.S., M.S.D.



T. P. Werblin, M. D., Ph.D.

Doctor Schwab, a native of Arthurdale (Preston County), is the author or co-author of several scientific articles, including "The Kenya Blindness Prevention and Health Education Project," and "Homocystinuria in Ethiopia: A Case Report."

He received both his undergraduate and M. D. (1966) degrees from WVU, and did postgraduate work at Louisiana State University, Harvard Medical School and Massachusetts Eye and Ear Infirmary in Boston, and at WVU.

Doctor Schwab currently is a Consultant to the International Eye Foundation. Outside the United States, he has lectured in El Salvador, Tanzania and Greece in addition to Ethiopia and Kenya.

Doctor Bouquot, who has held his present post since 1976, is actively involved in the diagnosis and management of common and unusual oral diseases, receiving patient referrals from throughout West Virginia and surrounding states to his Oral Pathology Clinical Consultation Service. His research interests center around epidemiologic evaluation of head and neck malignancies, and he has presented several papers at international meetings on this topic. He conducts dozens of continuing education seminars and courses each year for dentists and physicians.

Doctor Bouquot, who received both his D.D.S. degree and master's degree in oral pathology from the University of Minnesota, is an Associate Professor in the WVU School of Dentistry as well as Associate Professor of Pathology in the WVU School of Medicine.

On Louisiana State Faculty

Doctor Werblin went to Bluefield in 1981 from Louisiana State University in New Orleans, where he was Assistant Professor of Ophthalmology.

His research interests in immunology are generation of antibody diversity, immune tolerance, and B and T cell interaction; in ophthalmology, corneal dystrophies, external disease, refractive keratoplasty, and keratitis sicca.

Born in Mt. Vernon, New York, he was graduated from Princeton University and received both M. D. and Ph. D. degrees in 1972 from New York University in New York City as a National Institutes of Health Fellow. He did postgraduate work at Albert Einstein College of Medicine in New York City; National Institutes of Health in Bethesda, Maryland; Johns Hopkins University in Baltimore, and Louisiana State.

He is the author or co-author of some 45 scientific articles.

As announced previously, Dr. William Y. Rial of Swarthmore, Pennsylvania, who will be installed as President of the American Medical Association in Chicago this month, will address the first House session Thursday afternoon; and Dr. Edward N. Brandt, Jr., Assistant U. S. Secretary for Health in the Department of Health and Human Services in Washington, will deliver the keynote Thomas L. Harris Address during the opening exercises Friday morning.

Speaker from Ohio State

Dr. Henry A. Wise II, also as announced earlier, will speak on "Recent Advances in Urology" during the Saturday morning general session. Doctor Wise is Director and Associate Professor, Division of Urology, Ohio State University.

Serving on the Program Committee are Drs. Carl J. Roncaglione, South Charleston, Chairman; Jean P. Cavender, Charleston; Thomas P. Long, Man; David Z. Morgan, Morgantown; Kenneth Scher, Huntington, and Doctor Shannon.

The Annual Meeting of the Auxiliary to the State Medical Association, with Mrs. Logan W. Hovis of Vienna in charge as the Auxiliary's President, again will run concurrently with the Association's convention.

The remaining convention speakers and final arrangements will appear in the July and August issues of *The Journal.*

Family Practice Programs Will Graduate 23

The West Virginia University affiliated family practice residency program will graduate 23 new family physicians in July, according to the West Virginia Chapter of the American Academy of Family Physicians.

Of the 23 physicians, 17 will remain in West Virginia to practice, the AAFP noted.

The new physicians were trained at community hospitals in Wheeling, Clarksburg, Charleston and Morgantown.

Four of the 17 doctors staying in the state will practice in the Charleston area. Two will go to Parkersburg, and two will go to Wheeling. The others are settling in Smithers, Berkeley Springs, Harpers Ferry, Philippi, Bolivar, Bridgeport, Nutter Fort, Wellsburg and Kingwood.

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1982, as compiled by Dr. Robert L. Smith, Assistant Dean for Continuing Education, and J. Zeb. Wright, Ph. D., Coordinator, Continuing Education, Department of Community Medicine, Charleston Division. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of The Journal.)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Morgantown, Charleston and Wheeling campuses. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, 3110 MacCorkle Avenue, S. E., Charleston 25304; Office of Continuing Medical Education, WVU Medical Center, Morgantown 26506; or, Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

June 4-5, Morgantown, Anesthesia Update '82

June 5, Charleston, Ninth Annual Bert Bradford Wildwater Surgical Conference

June 11-12, Morgantown, Eighth Annual ENT Teaching Days

Regularly Scheduled Continuing Education Outreach Programs from WVU Medical Center/ Charleston Division

Buckhannon, St. Joseph's Hospital, 3rd floor, 3rd Thursday, 7-9 P. M.—June 17, "Poison Control," Kathryn Sensabaugh, R. N. (public program, 6:30-7:30 P. M.; Outreach Program, 7:30-9:15 P. M.).

Cabin Creek, Cabin Creek Medical Center, Dawes, 2nd Wednesday, 8-10 A. M.—June 9 (to be announced).

Gassaway, Braxton Co. Memorial Hospital, 1st Wednesday, 7-9 P. M.—June 2, "Ambulatory Rheumatology," John W. Byrd, M. D.

July 7, "Update Cardiology, Including Calcium Blockers," Stafford Warren, M. D.

Aug. 4, "Peridontal Disease: Recognition and Management," Wayne Given, D. D. S.

Madison, Allied Health Room, Boone Career Center, West Madison, 2nd Tuesday, 7-9 P. M. —June 8, "Blood Disorders: Diagnosis, Treatment & Referral," Steven Jubilerer, M. D.

Oak Hill, Oak Hill High School (Oyler Exit, N 19) 4th Tuesday, 7-9 P. M.—June 22, "Pediatric Oncology: New Hope," Jean Ross, M. D.

Welch, Stevens Clinic Hospital, 3rd Wednesday, 11 A. M.-1 P. M.—June 16, "Introduction to Calcium Blockers," Stafford Warren, M. D.

July 21, "Anxiety: The Therapeutic Dilemma," Richard Koon, M. D.

Whitesville, Raleigh-Boone Medical Center, 4th Wednesday, 11 A. M.-1 P. M.—June-August (summer vacation).

Williamson, Appalachian Power Auditorium, 1st Thursday, 6:30-8:30 P. M.—June 3, "Recent Advances in Gynecologic Oncology," Daniel A. Mairs, M. D.

Physicians Participating In Radio Series

Physicians and others are participating in a Charleston radio health education series, "You and Your Health."

The program is aired by WTIP Radio on Wednesdays from 12:05 to 12:30 P. M., with Nancy Hill of Charleston as hostess. Sponsors are the Kanawha Medical Society, Charleston Area Medical Center and Charleston Division, West Virginia University Medical Center.

The schedule for the next several months follows:

June 2, Phil Goodwin, "The Future of Large Metropolitan Hospitals;" June 9, Martha A. Whitlock, "The Hospital Patient Representative;" June 16, Paul Hlusko, M. D., "Attention Deficit Disorder: 'Hyperactivity';" June 23, Daniel MacCallum, M. D., "Doctor-Patient Relationship;"

July 28, Harry E. Duncan, M. D., "Hepatitis and Other Liver Disorders."

Over Half Of WVU Grads To Train In State

More than half of the 86 members of West Virginia University School of Medicine's class of 1982 will remain in the state for their residency training.

Of the 45 who will take postgraduate training in West Virginia, 25 will remain at the WVU Medical Center, 19 will enter programs at the Charleston Area Medical Center, and one will enter a residency in surgery at the Ohio Valley Medical Center in Wheeling.

Primary care specialities were the choice of 25, or 55.5 per cent, of those remaining in West Virginia.

Among all graduates, 22 chose internal medicine, 12 elected pediatrics, and six will enter family practice residencies.

Other residency choices were surgery, 18; anesthesiology, seven; radiology, five; obstetrics-gynecology, four; psychiatry and neurology, two each, and pathology, ophthalmology and neurosurgery, one each.

Four will enter flexible residency programs and choose specialties after the first year.

One graduate will take a one-year hiatus.

Class of '82

Members of the class of 1982, their hometowns and destinations are: Veda L. Ackerman, Morgantown, James Whitcomb Riley Children's Hospital, Indianapolis; Thomas R. Adamski, Elkins, WVU Department of Medicine; David J. Allison, Chester, WVU Department of Radiology; Douglas G. Althouse, New Canaan, Connecticut, Charlotte (North Carolina) Memorial Hospital; William H. Batten, Parkersburg, Ohio State University Hospitals, Columbus; Mark R. Bennett, Bruceton Mills, WVU Department of Pediatrics; Marguerite Bonaventura, Follansbee, University of Pittsburgh Health Center Hospitals; Christopher A. Borchert, Weston, William Beaumont Army Medical Center, El Paso, Texas;

Brian D. Brattlof, South Charleston, Madigan Army Medical Center, Tacoma, Washington; Jill A. Bross, St. Albans, Anthony L. Burke, Charleston, Gina R. Busch, Parkersburg, and Stephen H. Bush, Ravenswood, Charleston Area Medical Center (CAMC); Padmini Chak, Morgantown, Saginaw (Michigan) Cooperative Hospitals; David M. Cheney, Morgantown, York (Pennsylvania) Hospital; Robert S. Chernack, Belmont, Massachusetts, Boston University Hospital; Barbara A. Clark, Weirton, Beth Israel Hospital, Boston;

Leonard R. Coover, Morgantown, WVU Department of Radiology; Michael E. Cunningham, Paden City, Akron (Ohio) City Hospital; Charles R. Daniel, Beckley, CAMC; John E. Dennie, St. Albans, WVU Department of Medicine; James P. DeHaven, White Sulphur Springs, Walter Reed Army Medical Center, Washington, D. C.; Kevin L. DelliGatti, Fairmont, CAMC; Burt Fazi, Weirton, Allegheny General Hospital, Pittsburgh; Norman D. Ferrari III, Weirton, WVU Department of Pediatrics; Patrick J. Forte, Morgantown, WVU Department of Anesthesiology; Matthew M. Gangwer, Morgantown, McLaren General Hospital, Flint, Michigan;

Glenn R. Goldfarb, Charleston, CAMC; Ronald L. Gross, Huntington, Baylor College of Medicine, Houston, Texas; Regis W. Haid, Jr., Huntington, WVU Department of Neurosurgery; William D. Halstead, Charleston, Vanderbilt University Hospital, Nashville, Tennessee; Brenda L. Holbert, Morgantown, University of Texas Health Sciences Center, Houston, Texas; Philip H. Horner, Mannington, WVU Department of Family Practice; James E. Hurley II, Moundsville, WVU Department of Surgery; William R. Hutson, Petersburg, and Theodore A. Jackson, Charleston CAMC.

Katherine A. Jacobs, Charleston, Ochsner Foundation Clinic, New Orleans; Cathy S. Jones, Grantsville, WVU Department of Pediatrics; Donald H. Lee, Beckley, WVU Department of Surgery; Victor C. Lee, Oak Hill, Georgetown

(continued on page xxiv)

MU Clinical Affairs Post Goes To Doctor Baur

Dr. Jack H. Baur, a Huntington hematologist/oncologist, has assumed the post of Associate Dean for Clinical Affairs at the Marshall University School of Medicine, Vice President for Health Sciences Robert W. Coon, M. D., announced recently.

As Associate Dean, Doctor Baur will coordinate the School's residency program, serve as liaison for hospital-medical school relations, and handle various other administrative duties. He also will be involved in medical student and resident education as an Associate Professor of Medicine.

A graduate of the University of Cincinnati College of Medicine, Doctor Baur has practiced in Huntington since 1955, and has been a member of the Huntington Internal Medicine Group for the past 11 years.

Dr. Robert D. Hess New AAFP President

Dr. Robert D. Hess of Clarksburg was installed as President of the West Virginia Chapter, American Academy of Family Physicians, during the Chapter's 30th annual scientific assembly this spring in Morgantown.

Doctor Hess, a Past President of the State Medical Association, is Director of Medical Education at United Hospital Center, Inc., in Clarksburg.

Dr. Thomas L. Ritz of Wheeling, the 1981-82 President, becomes Chairman of the Board.

Dr. Arlo P. Brooks, Jr., of Parkersburg was elected President Elect.

Other new officers elected were Drs. William H. Harriman, Jr., Terra Alta, Vice President; Joseph B. Reed, Buckhannon, Secretary; L. Dale Simmons, Clarksburg, AAFP Delegate; John L. Fullmer, Morgantown, and Thomas P. Long, Man, AAFP Alternate Delegates, and Roland S. Birckhead, Gauley Bridge, member of the board of directors, District V.

Robert Denitzio of Clarksburg was elected Resident Member, and elected as Student Members were Stephen Freshwater, West Virginia University School of Medicine; and Susan A. Terry, Marshall University School of Medicine.

Dr. J. C. Huffman (standing, right) of Buckhannon was presented the 1982 "Mr. Doc Award" for his contributions to medicine by the West Virginia Chapter, American Academy of Family Physicans, during the Chapter's annual meeting this spring in Morgantown. Congratulating Doctor Huffman is Dr. Robert D. Hess of Clarksburg, who was installed as President during the meeting. In the foreground are Dr. and Mrs. Thomas L. Ritz of Wheeling. Doctor Ritz was the 1981-82 President.

Re-elected were Drs. I. M. Kruger, Virginia Beach, Virginia, Treasurer; Joseph A. Smith, Dunbar, AAFP Delegate, and board members Thomas G. Wack, Wheeling, District I; Wilbur Z. Sine, Morgantown, District II; Larry C. Rogers, Petersburg, District III; Michael J. Lewis, Saint Marys, District IV; D. Dean Patton, Princeton, District VI; John V. Merrifield, Dunbar, District VII, and Jose I. Ricard, Huntington, District VIII.

Review A Book

The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal*, Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication.

Current Medical Diagnosis & Treatment 1982, by Marcus A. Krupp, M. D.; and Milton J. Chatton, M. D. (with associate authors). 1,113 pages. Price $23. Lange Medical Publications, Los Altos, California 94022. 1982.

Physician's Handbook, 20th Edition, by Marcus A. Krupp, M. D.; Lawrence M. Tierney, Jr., M. D.; Ernest Jawetz, M. D., Ph.D.; Robert L. Roe, M. D.; and Carlos A. Camargo, M. D. 774 pages. Price $12. Lange Medical Publications, Los Altos, California 94022. 1982.

Current Pediatric Diagnosis & Treatment, 7th Edition, by C. Henry Kempe, M. D.; Henry K. Silver, M. D., and Donough O'Brien, M. D. 1,106 pages. Price $26. Lange Medical Publications, Los Altos, California 94022. 1982.

Residency Locations Named For 23 MU Graduates

Results from the National Residency Matching Program show that 11 of the 23-member Marshall University School of Medicine's 1982 graduating class will take their residency training in West Virginia. Of the 11, 10 will study at Marshall and one in Wheeling.

Electing to remain at Marshall are: Gretchen E. Oley and Thomas B. Styer, both of Huntington; James M. Bennett, James W. Matthews and Lee B. Smith, all of Charleston; Donald L. Chaffin of Prestonsburg, Kentucky; Kim M. Jordan of

Petersburg; Michael E. Kilkenny of Ballard (Monroe County), Curtis A. Winter of Weirton, and Richard A. Yocum of Moundsville.

Wheeling native Kenneth K. Kline will go to Wheeling Hospital, while Brian Fawcett, also of Wheeling, has elected for residency training with the U.S. Navy.

Going to North Carolina Baptist Hospital-Bowman Gray School of Medicine at Wake Forest University are Virginia K. Blevins of Chapmanville, John G. Boswell of Princeton and Ron D. Stollings of Danville.

Students from Huntington heading elsewhere for additional training are Joseph E. Evans and Rose Goodwin, Ohio State University Hospitals, Columbus; Elizabeth F. Kemp, University of Kentucky Medical Center, Lexington, and Clayton L. Walker, William Shands Hospital-University of Florida, Gainesville.

Robert W. Keefover of Fairmont will go to Strong Memorial Hospital, Rochester, New York, and Michael P. Kruger of Logan will train at University of Connecticut Affiliated Hospitals in Farmington. Charleston natives Steven D. McCarus and Katherine M. Stone will go to the greater Baltimore Medical Center and Cincinnati General Hospital-University of Cincinnati, respectively.

The students will begin their residency programs on July 1.

Doctor Bradley Chairman Of Surgery At MU

Dr. Robert L. Bradley, Professor of Surgery and Anatomy, has been appointed Chairman of the Marshall University School of Medicine's Department of Surgery, Dr. Robert W. Coon, School Dean, announced.

Doctor Bradley, who has been with the medical school since 1975, was serving as Acting Department Chairman. He succeeds Dr. George J. Hill, who served as Chairman from May, 1976, through June, 1981.

"A native of West Virginia, Doctor Bradley is well known and respected by his colleagues. He has performed effectively and enthusiastically in any role the school has assigned him and we are pleased he has accepted this new challenge," Doctor Coon said.

Prior to joining the MU medical faculty, Doctor Bradley was Chief of Staff for Education and Acting Chief of the Surgical Service at the Lexington (Kentucky) Veterans Administration Medical Center. He also served as Chief of the Surgical Service at the Huntington VA Medical Center from 1951 to 1970.

A graduate of West Virginia University, he received his M. D. degree from Northwestern University and a Ph.D. degree in anatomy later from the University of Kentucky.

Doctor Ryan Receives Award

Dr. Ralph W. Ryan, Morgantown ophthalmologist, was honored at a banquet held recently in Morgantown.

Doctor Ryan, a former member of the State Medical Association's Council, received the Man of Vision Award from the Friends of Eye Research. The President of that group is Dr. Charles L. Schepens of Houston, principal speaker for the banquet, who also is President and founder of Boston's Eye Research Institute.

Doctor Ryan also was honored last year by the West Virginia Division of Vocational Rehabilitation for his rehabilitation service to the blind and visually impaired in the state.

Doctor Vincent To Leave Post

Dr. Lyle D. Vincent, part-time Health Officer for the Parkersburg-Wood County Health Department for more than 24 years, will resign June 30.

Doctor Vincent, who will devote full time to his private practice in Parkersburg, cited the expansion of operations and the regionalization of health departments as reasons for his resignation.

Greenbrier Reservations Due By July 11

Reservations for the 115th Annual Meeting of the West Virginia State Medical Association should be made with the Greenbrier no later than Sunday, July 11, in order to comply with the hotel's requirement that all reservations must be received no later than 45 days prior to the meeting. Reservation forms provided by the Greenbrier have been distributed to all Association members. Any physicians who need additional forms should write or call the Association's headquarters office in Charleston.

Accurate Evidence The Key In Disability Cases

The State of West Virginia's Disability Determination Section requires a specialist consultative examination in a larger percentage of cases than any of the surrounding states, recent statistical summaries disclosed.

Of 26,936 cases adjudicated last year, 10,083 required another exam, for a 37.4-per cent rate. A reduction in this percentage perhaps would allow an increase in the payment for each specialist exam which was *really* required in order to *generate* the factual information needed which had never before been made available regarding this claimant, DDS officials said.

For example, if the medical evidence of record was sufficient to make a medical-vocational determination of the degree of disability in just 65 per cent of the cases instead of 62.6 per cent, then an $81,000 savings would be available. This perhaps could be used to better reimburse specialists for the slightly fewer and better exams.

Medical records and/or abstracts, however, sometimes do not contain a few critical details necessary to document a particular condition such as paralysis. The descriptions needed are so patently obvious to the physician during his examination and then implied in any abstract that it might seem a waste of valuable time and space to record them. Some examples would be "marked atrophy" or measurements of bilateral limb segments, absent reflexes, and descriptions of impaired or unimpaired ability to stand or walk.

Conclusions Not Wanted

In angina, as another example, the physician elicits many diagnostically-important details in his routine office visits with the patient through the months following the first attack. However, in concentrating on the progress of the basic condition, the physician would tend to record his conclusions about the progress rather than all those detailed signs by which he reached the conclusion on the current status of the angina. Since large numbers of angina patients do work, the details become critical to Disability Determination in deciding precisely the level of impairment.

Therefore, disability examiners are in the unenviable position of asking the cooperating treating specialists or general practitioner who has already supplied an otherwise thorough abstract to give DDS still more details on what brings on the angina: the frequency, day or night, how long does it last, and what relieves it? However, the only other DDS resort is to go for still another specialist examination to obtain these "simple" facts.

"We understand that sometimes problems arise when comprehensive medical evidence of record is provided to Social Security by the treating physician," the DDS said.

"One potential problem is the loss, in anger, of the doctor-patient relationship. This might occur when the patient finds out that the physician with whom he is personally acquainted has submitted medical data which failed to establish the patient's eligibility for Social Security benefits."

Consult Handbook

One way to handle this and related matters is to review the "listings" in the Physician's Handbook to determine whether or not a physician thinks the patient *meets or exceeds* the "listings." A physician can telephone the disability examiner indicating the laboratory data, x-ray reports, and specific detailed descriptions of functional loss related to the major impairment, plus any other handicapping conditions already on hand. The examiner then may outline the additional examination information needed and authorize additional tests at Social Security expense, which will help further to define the severity of the medically-established impairment.

An early explanation to the client of the physician's role in the "determination of disability" usually will offset the client's anger and disappointment, DDS officials feel. It is in the physician's *and the claimant's* interest to maintain a healthy Social Security Fund. In order to do this, only individuals who can do *no* useful work should receive monthly benefits. The physician also can point out that Vocational Rehabilitation often can help them if they need surgery or other treatment or training in order to get into employment. Thus, the physician works *with* his patient on a solution rather than both becoming frustrated.

The treating physician is simply supplying facts—not opinions—to the Social Security Administration. From these facts and any other facts available, a decision is made by the reviewing physician at the Disability Determination Office as to the "residual functional capacity" in percentages for each of the major body systems.

Determining Disability

A layman disability examiner, trained in vocational analysis, then makes a final decision on whether the applicant, in the light of age, work history, and educational attributes, reasonably

can be expected to use the remaining capacity to find employment. The national labor market is used because this is not an unemployment compensation program but, rather, a total disability from any employment program.

"Your patients who have an impairment which is a handicap, but acute, treatable or less than totally incapaciting, should be referred to one of the 26 local offices of Vocational Rehabilitation to see if the provision of services (vocational counseling, restoration, and/or training) might help them obtain employment," the DDS office has advised physicians.

If a physician has questions or suggestions, or would like additional information such as "Disability Evaluation under Social Security: A Handbook for Physicians," or a speaker regarding the whole matter of disability determination, he or she should contact David H. Cleland, Medical Relations Officer, at 348-5340, Disability Determination Section, 1206 Quarrier Street, Charleston 25301.

In summary, the treating physician can save his or her patients time and money, obtain some key lab and x-ray studies of the patient's major disabling condition, and better understand the patient's condition, the DDS unit explained.

Training On Cost Effectiveness In School Recommended

Physicians should be given the necessary training in medical school to provide health care in the most cost-effective manner, according to the federal General Accounting Office (GAO).

A recent GAO report, the American Medical Association has noted, recommended that the U. S. Department of Health and Human Services monitor incorporation of such training at medical schools and, on a carefully-selected basis, provide federal funding for seminars and conferences on the issue.

Medical school courses vary widely in approach and emphasis, and need to be increased, said the GAO, recommending "thoroughly integrating cost-containment instruction into the clinical phases of medical education."

One approach might be to include questions that deal with elements of cost containment in medical examinations, said the GAO.

The agency cited one study that showed a one-year course of instruction resulted in a sharp decline in laboratory tests ordered by first-year residents. The drop in tests ranged from 29 per cent to 47 per cent, an average reduction of $455 per hospitalization.

Medical Meetings

June 13-16 — Am. College of Surgeons, Gleneden Beach, OR.

June 13-17 — Annual Meeting of AMA House of Delegates, Chicago.

June 13-18—2nd. Annual School on Behavioral Health Studies (WV Dept. of Health, etc.), Morgantown.

Aug. 26-28—115th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Aug. 30-Sept. 2—Am. Hospital Assn., Atlanta.

Sept. 20-23—Am. College of Radiol., Boston.

Sept. 25-Oct. 1—Am. College of Emergency Physicians, San Francisco.

Sept. 29-Oct. 2—Am. Neurological Assn., Washington, D. C.

Sept. 30 - Oct. 2 — Women's Health Conference (WVU), Morgantown.

Sept. 30-Oct. 3—ASIM, Chicago.

Oct. 4-7—AAFP, San Francisco.

Oct. 10-15—Am. College of Chest Physicians, Toronto.

Oct. 15-17—Med. Society of the District of Columbia, White Sulphur Springs.

Oct. 22-24—PA Med. Society, Philadelphia.

Oct. 23-28—Am. Academy of Pediatrics, New York City.

Oct. 24-29—Am. College of Surgeons, Chicago.

Oct. 24-30—Am. College of Gastroenterology, New York City.

Oct. 30-Nov. 2—Southern Med. Assn., Atlanta.

Nov. 4-6—Am. Cancer Society, New York City.

Nov. 7-10—National Hospice Organization, Washington, D. C.

Nov. 10-14—Med. Society of VA, Williamsburg.

Nov. 15-18—Am. Heart Assn., Dallas.

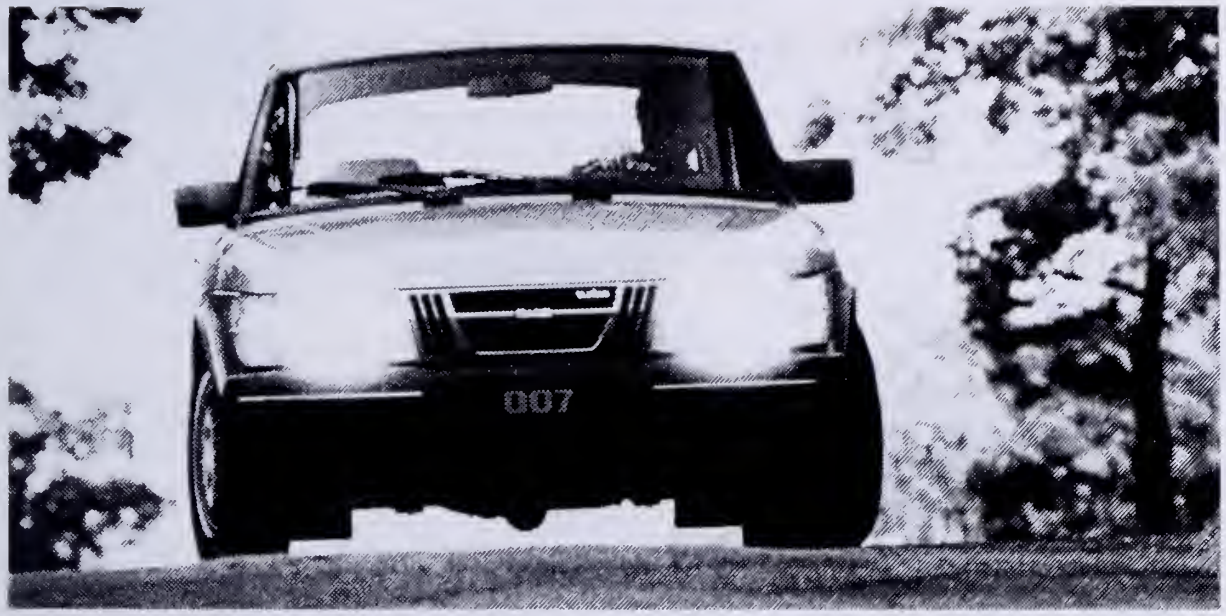
Dec. 2—Am. College of Chemosurgery, New Orleans.

Dec. 5-8 — Interim Meeting, AMA House, Miami Beach.

Dec. 11-12—National Kidney Foundation, Chicago.

1983

Jan. 21-23—16th Mid-Winter Clinical Conference, Charleston.



JAMES BOND JUST TRADED HIS BENTLEY FOR A SAAB 900 TURBO.

The Master Spy's exploits, of course, are fictional.

But his reasons for choosing the Saab 900 Turbo, as revealed by author John Gardner in *License Renewed,* are real:

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WVU Medical Center
–News–

Compiled from material furnished by the Medical Center News Service, Morgantown, W. Va.

Doctor Watne President Of Surgeons' Group

Dr. Alvin L. Watne, Professor and Chairman of Surgery, was installed as President of the Society of Head and Neck Surgeons at its annual meeting in Marco Island, Florida.

Doctor Watne is one of four West Virginia surgeons who are members of the organization. He also serves on the executive board of the Society of Surgical Oncology, which held its scientific session in conjunction with the Society of Head and Neck Surgeons meeting.

Alvin L. Watne, M. D.

The Society of Head and Neck Surgeons was organized in 1954 in New York by Dr. Hayes Martin, considered by many to be the "father of modern head and neck tumor surgery." From the original 50 members, the Society has grown to include surgeons from every section of the United States and Canada as well as a large foreign corresponding membership.

The original scientific papers presented at the annual meeting appear each year in the *American Journal of Surgery*.

Doctor Watne is Charleston Foundation Professor of Cancer Research at WVU, and serves as program director for two training grants from the National Cancer Institute.

A graduate of the University of Illinois and its College of Medicine, he was Associate Chief Cancer Research Surgeon at Roswell Park Memorial Institute in Buffalo, New York, before coming to WVU in 1967.

He is a former President of the West Virginia Division and Monongalia County Unit of the American Cancer Society and the West Virginia Chapter of the American College of Surgeons.

He also is a member of the Halsted Society, Alpha Omega Alpha, the Southern Surgical Association, the Warren H. Cole Surgical Society, the Pittsburgh and Roswell Park surgical societies, and the American Association for Cancer Research.

Pediatrics Launches SIDS Counseling Project

Added help for families of Sudden Infant Death Syndrome victims and greater public awareness of SIDS is the purpose of a new program of the Department of Pediatrics.

Known as the West Virginia Sudden Infant Death Syndrome Counseling and Information Project, the program is being financed with a one-year grant of $35,600 from the U. S. Department of Health and Human Services.

It is being directed by Dr. David Z. Myerberg, Assistant Professor of Pediatrics, and coordinated by Kathy Hopkins, a former public health nurse.

The project's primary goal is to enhance the existing SIDS management system of the West Virginia Department of Health. This will be accomplished through workshops for health care professionals, improved referral and data collection systems, and efforts to increase public awareness of SIDS.

A 14-member community council will assist Doctor Myerberg and Ms. Hopkins in implementing the WVU project. Members include Dr. Irvin M. Sopher, Chief Medical Examiner for the State of West Virginia; SIDS Coordinator Elizabeth Cochran and Mel Henry of the State Health Department, representative community health nurses, SIDS parents, emergency medical service personnel, a funeral director, and Larry Schifano, Chairman of the West Virginia House of Delegates' Committee on Health and Welfare.

Training in SIDS counseling for community health nurses has been done on a regional basis. These nurses have been providing support and information to SIDS families since the state program began in 1980.

GOLDEN MEDICAL GROUP

1200 Harrison Avenue

ELKINS, WEST VIRGINIA

ANESTHESIOLOGY:
Y. H. Chung, M. D.
F. D. Dombkoski, D. O.

COMMUNITY MEDICINE:
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S. O. Chung, M. D.
M. C. Rosenberg, D. O. (Helvetia Clinic)

EMERGENCY MEDICINE:
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A. M. Fuller, M. D.
F. A. Khan, M. D.
D. J. Lloyd, M. D.

FAMILY PRACTICE:
L. H. Valliant, M. D.

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Allergy & Rheumatology:
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Cardiology:
H. L. Jellinek, M. D.
R. B. Garrett, M. D.
Metabolic & Endocrine Diseases:
F. Becerra, M. D.
Pulmonary Diseases:
J. C. Arnett, Jr., M. D.

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J. F. de Courten, M. D.
J. J. Rizzo, M. D.
M. W. Strider, M. D.

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ORTHOPAEDIC SURGERY:
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D. R. Antonio, M. D.
OTOLARYNGOLOGY (Facial Plastic and Reconstructive Surgery):
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M. M. Stump, M. D.
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RADIOLOGY:
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H. Y. Mang, M. D.
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General, Thoracic & Vascular:
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B. R. Blackburn, M. D.
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L. R. Cain, M. D.
Hematology/Oncology
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J. H. Mahan, M. D. (St. Clairsville)
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R. S. Glass, M. D.
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UROLOGY
D. C. Trapp, M. D.
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T. A. Athari, M. D.
J. W. Campbell, M. D.
R. T. Brandfass, M. D.
C. V. Porter, M. D.
R. A. Porterfield, M. D. (St. Clairsville)

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M. E. Nugent, M. D.
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D. Mirate, M. D.
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K. W. Waterson, M. D.
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S. G. Christopher, M. D.
W. Zyznewsky, M. D.
J. D. Tellers, M. D.
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S. Kapen, M. D.
Neuropathology
S. Govindan, M. D.

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D. P. Hill, M. D.
D. H. Smith, M. D.
Pediatric Psychiatry
V. Stein, M. D.
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Speech Therapy/Audiology
J. F. Frum, M. S., S.P.A.
Biofeedback Laboratory
M. G. Simon, P. A.
Electrology/Cosmetic Therapy
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D. O. PORTERFIELD — Business Manager (St. Clairsville)

Third-Party News, Views and Program Concerns

Reminder Issued By Medicaid About Private Payors

A federal regulation (45CFR250.31) mandates the Medicaid Program to be the payor of last resort if any other corporation, institution, public or private agency or individual is involved, the West Virginia Department of Welfare again has reminded providers.

"In condensed form, this means that if your patient is a recipient of the Medicaid Program and the patient also should have private insurance, VA, UMW, Workmen's Compensation or other coverage, you should bill these entities and receive a payment or denial prior to the submission of any billing to the Medicaid Program," the agency said. It added:

"If a payment is made by any other source and you feel that additional payment could be made by the Department of Welfare, you have the option of billing the Medicaid Program, reporting what payment you have received.

"There is a definite indication that many physicians and clinics do not request and/or take assignment if a patient also is a Medicaid recipient."

Secure Information

Prior to submitting a claim to Medicaid, all providers should secure information regarding possible third-party coverage, and should require an assignment of benefits prior to the release of any information which can be used for insurance settlement, the Department explained.

If third-party liability can be established as available within four months from the date of service, invoices should be held until payment is received and indicated on the claim form. The balance of the charge may be billed to Medicaid. However, *UNDER NO CIRCUMSTANCES WILL THE MEDICAID PAYMENT OR A COMBINATION OF MEDICAID PLUS THIRD-PARTY EXCEED THE MEDICAID ALLOWABLE AMOUNT.*

If the third-party resource is denied or will not be available within four months, verification of this should be submitted with the Medicaid claim form. The invoice will be processed and payment made.

When the third-party payment is received, the provider must adjust or void the paid claim by filing an adjustment/void form (WVMMIS 051-A for outpatient or physician, WVMMIS 011-A for inpatient).

Results of adjusted/voided claims will be reflected in the remittance generated by the next payment cycle.

Hospital-Based Physicians Termed Independent

Hospital-associated physicians such as many pathologists, radiologists and emergency room physicians should be regarded as independent contractors rather than as employees of the hospitals, the American Medical Association has told Congress.

The definition is of importance under the federal tax laws, the AMA said, adding that refusal of the Internal Revenue Service (IRS) to recognize such physicians as independent contractors would have an impact on the operations of the hospitals as well as the tax treatment of the physicians involved.

Jerald Schenken, M. D., a member of the AMA's Council on Legislation, told a Senate Finance Subcommittee that, historically, hospital-associated physicians have been considered by the IRS to be independent contractors under the common law rules, and have not been considered employees of hospitals.

However, starting in the late 1960s, he said, the IRS, "often arbitrarily," attempted to reclassify many independent contractors. Due to protests and uncertainties about the tax agency's policies, Congress in 1978 imposed a temporary moratorium on IRS rulings on the issue. The current moratorium expires July 1, and legislation has been introduced to spell out the criteria for independent contractors.

Doctor Schenken said physicians are concerned that the legislation "fails to take into account the unique circumstances of professionals, such as hospital-associated physicians."

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Obituaries

ERNEST G. GUY, M. D.

Dr. Ernest G. Guy of Philippi, an internist, died on April 14 in a hospital there. He was 61.

Doctor Guy had been a member of the staff at Broaddus Hospital and Myers Clinic in Philippi since 1956.

A native of Harmony, North Carolina, he was graduated from the University of North Carolina and received his M. D. degree in 1944 from the University of Maryland. He interned and took his residency at the University of Maryland Hospital.

Doctor Guy was a Diplomate of the American Board of Internal Medicine; a member and Past President of the Tygart's Valley Medical Society; and a member of the Southern Medical Association, West Virginia State Medical Association, American Geriatrics Society, and American College of Physicians.

He served in the U. S. Army during World War II and the Korean War.

Survivors include the widow; a daughter, Dr. Antionette Guy of Morgantown; two sons, Drs. Sam Guy and Charles Guy, both of Morgantown; a brother, David N. Guy of Lumberton, North Carolina, and a sister, Mrs. Harold Calhoun of Harmony.

* * *

PRUDENCIO B. CAMARA, M. D.

Dr. Prudencio B. Camara, Hinton surgeon, died on May 7 in a hospital there. He was 59.

Doctor Camara was the first chief of Staff and a former Chief of Surgery at Summers County Hospital in Hinton.

Born in Danad, Cebu, the Philippines, he was graduated from the University of San Carlos in the Philippines and received his M. D. degree in 1952 from the University of Santo Tomas in Manila. He interned at Mt. Sinai Hospital in Miami Beach, Florida, and took his residency at Saint Thomas Hospital in Nashville, Tennessee.

Doctor Camara was a member of the Summers County Medical Society, West Virginia State Medical Association, American Medical Association, and American Society of Abdominal Surgeons.

He also was a member of the Summers County Board of Education, and was named Man of the Year in 1972 by the B.P.O. Elks in Hinton.

Survivors include the widow; a son, Mecot Camara, with the U. S. Marines; two daughters, Mrs. Teresa Lilly of Hinton and Miss Elisa Camara, at home; six sisters, Amparo Sisson, Jesusa Maqsayo, Luzconsuelo Camara and Jorgia Semense, all of the Phillipines; Mrs. Gemma Leftwick of Hinton, and Mrs. Emperatriz Frost of Roanoke, Virginia; and seven brothers, Vicente, Alfonso, Jose, Francisco, Ramon, Valentino and Isidro, all of the Philippines.

* * *

DAVID P. COLE, M. D.

Dr. David P. Cole of Point Pleasant died on May 5 in a Huntington hospital. He was 60.

Doctor Cole, born in Campbellsville, Kentucky, was a radiologist at Pleasant Valley Hospital in Point Pleasant. He practiced in Kewanee, Illinois, before coming to West Virginia in 1977.

Doctor Cole received his M. D. degree in 1950, interned at San Diego (California) County Hospital in 1950-51, and completed residencies at hospitals in Ohio and West Virginia from 1970 to 1973.

A veteran of World War II, he was a member of the Mason County Medical Society and the West Virginia State Medical Association.

Survivors include the widow; a stepdaughter, Anna Louise Grimstead of New Haven (Mason County); four sons, Scott L. Cole, with the Army in Germany; David V. Cole II of Huntington, Larry Cole of Lexington, Kentucky, and Kenneth Cole of Lewisburg; a sister, Mildred Cole of Campbellsville; and two brothers, Milton Cole of Sarasota, Florida, and Stewart Cole of Virginia Beach, Virginia.

* * *

Bronco Junction Founder Dies

Lois B. Scherr of Scottsdale, Arizona, a former Charleston resident, an attorney and co-founder of Allergy Rehabilitation Foundation, Inc. (Camp Bronco Junction), died at her home on May 3. She and her husband, Dr. Merle S. Scherr of Scottsdale, established the camp near Charleston for children with chronic bronchial asthma. They moved to Arizona in 1979.

County Societies

CABELL

The Cabell County Medical Society met on April 8.

The guest speaker was Dr. Alvero Morales of Sudbury, Ontario, Canada, who presented an informative lecture on the treatment of sexual dysfunction in males.

A moment of silence was observed in the memory of the late Dr. Robert G. Arrington of Huntington.

Charles M. Polan, Jr. (D-Cabell), West Virginia House of Delegates Finance Chairman, and Society members discussed recent legislative developments. The Society then approved the formation of a political action committee to be known as Southern West Virginia Allied Physicians for Better Government.

Dr. Dorsey Ketchum (D-Cabell), Vice Chairman of the House Health and Welfare Committee, West Virginia House of Delegates, announced that although he filed for re-election he has decided not to campaign actively for the Legislature again. The Society accepted his decision with regret.—Robert B. Belshe, M. D., Acting Secretary.

* * *

McDOWELL

Dr. Abnash Jain of Morgantown was the guest speaker for the meeting of the McDowell County Medical Society on April 14 at Stevens Clinic Hospital in Welch.

Doctor Jain, Professor of Medicine and Chief, Section of Cardiology at the West Virginia University Medical Center, spoke on low channel calcium blockers.

Delegates and Alternates were elected for the upcoming Annual Meeting of the State Medical Association.—Muthusami Kuppusami, M. D., Secretary.

* * *

HARRISON

The Harrison County Medical Society met on April 1 at the Sheraton Inn in Clarksburg.

An afternoon educational program, presented by physicians from the West Virginia University Medical Center, included:

"Recent Advances in Treatment of Coronary Heart Disease," Abnash Jain, M. D., Professor

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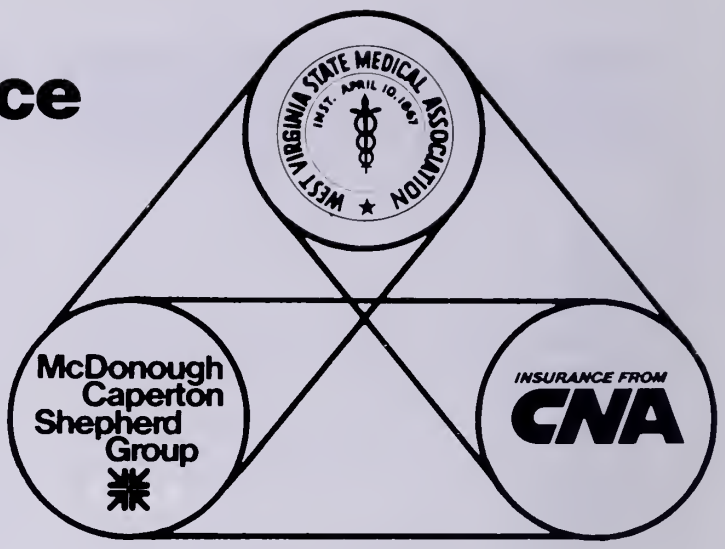

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University Hospital, Washington, D. C.: Douglas E. Lemley, Wheeling, William Shands Teaching Hospital, Gainesville, Florida; James S. Lewis, Mullens, CAMC; Eleanor K. Lowry, Mt. Pleasant, Pennsylvania, North Carolina Memorial Hospital, Chapel Hill; Ralph N. McDonald, Morgantown, WVU Department of Medicine; Mary V. McQuade, Oak Hill, St. Francis General Hospital, Pittsburgh;

Barbara A. McQuinn, Huntington, Faulkner Hospital, Boston; William L. Manion, Warminster, Pennsylvania, University of Pennsylvania Graduate Hospital, Philadelphia; Bertram D. Martin, Morgantown, WVU Department of Medicine; Mark W. Minor, Wellsburg, CAMC; Jeffrey A. Moore, Spokane, Washington, Allegheny General Hospital, Pittsburgh; John M. Moore, Wheeling, WVU Department of Anesthesiology; Matthew D. Moore, Morgantown, WVU Department of Family Practice; Lyndon W. Morgan, Morgantown, WVU Department of Ophthalmology; Timothy L. Mullins, Morgantown, WVU Department of Obstetrics-Gynecology.

Mark A. Myers, Wheeling, WVU Department of Family Practice; John G. Nicholas, Charleston, CAMC; John T. O'Donnell, South Charleston, St. Luke's-Roosevelt Hospital Center, New York City; Rachel C. Owens, Charleston, CAMC; John M. Peterson, Charleston, Ohio Valley Medical Center, Wheeling; Mark J. Polak, Morgantown, WVU Department of Pediatrics; Basil L. Pugh, Hacker Valley, Naval Regional Medical Center, Oakland, California; Kimberly B. Pugh, Ivydale, one year of hiatus; Robert F. Raspa, Fairmont, Naval Aerospace and Regional Medical Center, Pensacola, Florida;

Larry R. Reynolds, East Bank, CAMC; Robert A. Ringel, Morgantown, WVU Department of Neurology; Terry Lynn Schwartz, Morgantown, University of Pittsburgh Health Center Hospitals; Liane Sher, Akron, Ohio, Mercy Hospital, Pittsburgh; William R. Sigmund II, Beckley, Johns Hopkins Hospital, Baltimore; Rosanna D. Sikora, Weirton, WVU Department of Medicine; Marvin L. Simons, Jr., Summersville, Conemaugh Valley Memorial Hospital, Johnstown, Pennsylvania; Kimberly L. Skaff, Charleston, WVU Department of Neurology; William D. Smith, Clarksburg, WVU Department of Anesthesiology.

Richard G. Snyder, Morgantown, Malcolm Grow Air Force Hospital, Washington, D. C.; David L. Soulsby, Pratt, Jim H. Sponaugle, Charleston, and Marvin L. Sponaugle, Franklin, CAMC; Mont P. Stern, Fairmont, WVU Department of Medicine; Ellen K. Tabor, Bluefield, University of Pittsburgh Health Center Hospitals; Domenick P. Trivisonno, Philippi, Allentown (Pennsylvania) Affiliated Hospitals; Frank S. Veltri, Worthington, William Shands Teaching Hospital, Gainesville, Florida; James M. Waldeck, Charleston, CAMC;

Carl E. Weimer, Jr., Maysville, University of South Carolina Medical Center, Charleston; Joe J. White, Charleston, CAMC; Mark D. White, Logan, University of Tennessee Memorial Hospital, Knoxville; Henry D. Windler, Morgantown, WVU Department of Radiology, and Christine H. Wolf, Morgantown, Cleveland (Ohio) Clinic.

COUNTY SOCIETIES—*Continued*

of Medicine and Chief, Cardiology Section; "New Developments in Pediatric Surgery," Ellen E. Hrabovsky, M. D., Associate Professor of Surgery; "Inflammatory Bowel Disease," Ronald D. Gaskins, M. D., Associate Professor, Gastroenterological Section, Department of Medicine, and "Interventional Radiology," M. K. Elyaderani, Associate Professor of Radiology.

The presentations were followed by dinner and a business meeting.—James E. Bland, M. D., Acting Secretary.

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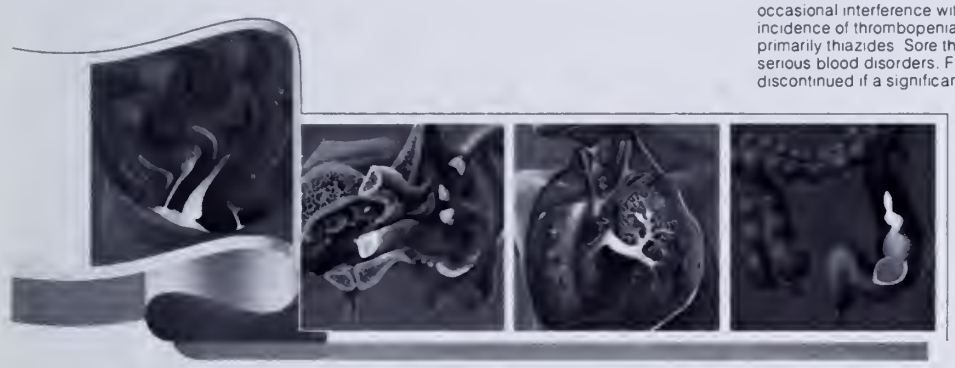

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Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.

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Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN:

Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.

Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.

For patients with renal impairment: Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.

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Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 14 days.

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1. Rubin RH, Swartz MN: *N Engl J Med 303* 426-432, Aug 21, 1980. 2. Data on file, Medical Department, Hoffmann-La Roche Inc.

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Three?
Page 172

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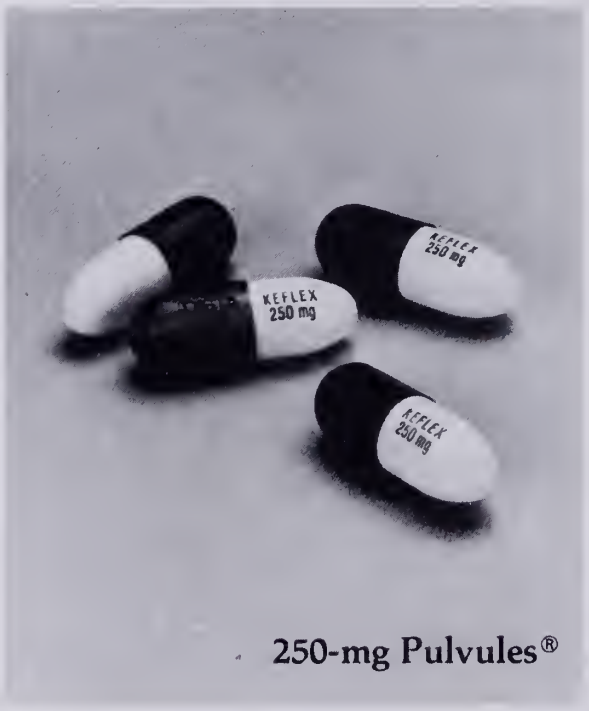

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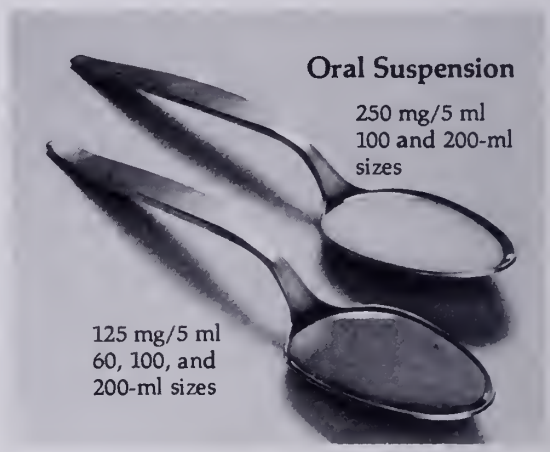

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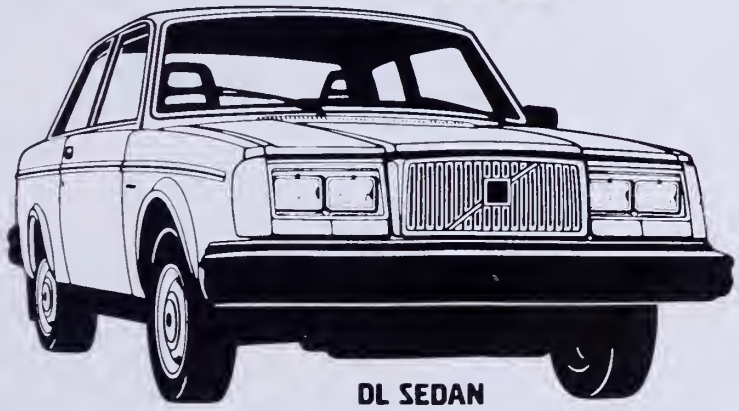

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In the treatment of insomnia

Good mornings start with restful nights.

Dalmane *(flurazepam HCl/Roche)* patients fall asleep faster, sleep longer and seldom awaken with morning hangover.

Feeling well rested in the morning usually means having slept well the night before. And for insomniac patients receiving hypnotic therapy, a good morning also means awakening with few side effects from their medication. Many physicians choose Dalmane for their patients who suffer from insomnia for this very reason.

Aside from enabling patients to fall asleep more quickly and sleep longer, Dalmane seldom causes morning hangover. Most Dalmane patients feel alert and refreshed when they awaken. In 53 paired-night clinical studies comparing Dalmane and placebo in 2010 insomniac patients with a variety of secondary diagnoses, most Dalmane patients awakened more alert and refreshed, and less groggy and drowsy, than on nights when they had taken only placebo.[1] In a double-blind crossover study of 42 patients in private practice, approximately three times as many patients reported feeling refreshed and alert upon awakening after a night on Dalmane (flurazepam/Roche) compared to placebo nights.[2] This difference was highly significant ($p<0.001$). And a retrospective study of 2542 hospitalized patients who received Dalmane revealed only a 3.1% incidence of side effects.[3]

While residual effects from Dalmane therapy are infrequent, patients should be cautioned about drinking alcohol, driving or operating hazardous machinery after ingesting the drug.

Efficacy and safety in a broad range of patient types.

Over 2000 clinical trials involving more than 10,000 patients have shown that Dalmane patients fall asleep sooner, sleep longer and experience fewer nocturnal awakenings.[4] The safety and efficacy of Dalmane have been demonstrated in medical and surgical hospitalized patients, in patients seen in office practice and in elderly patients.[5-8] Since the risk of oversedation, dizziness, confu-

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sion and/or ataxia increases with larger doses in the elderly, it is recommended that the dosage be limited to 15 mg.

Moreover, the efficacy and safety of Dalmane for the treatment of insomnia have been demonstrated in thousands of patients with a variety of primary medical conditions, including cardiovascular, neuropsychiatric, endocrine-metabolic, gastrointestinal, genitourinary, respiratory and musculoskeletal disorders.[1] Dalmane (flurazepam HCl/Roche) is contraindicated in pregnancy and in patients hypersensitive to the drug.

Avoids rebound insomnia upon discontinuation.

Rebound insomnia—a worsening of sleep beyond pretherapy levels after drug discontinuation—has been reported as a potential clinical problem with some hypnotics.[9,10] However, this problem has not been reported with Dalmane. In eight out of eight sleep laboratory studies, there were no reports of rebound insomnia.[11] When you prescribe Dalmane, you can be confident of efficacy that enhances therapeutic progress. Your insomniac patients can be assured of a restful night, night after night—a good start for a good morning.

References: **1.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **2.** Zimmerman AM: *Curr Ther Res 13*:18-22, Jan 1971. **3.** Greenblatt DJ, Allen MD, Shader RI: *Clin Pharmacol Ther 21*:355-361, Mar 1977. **4.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **5.** Meyer JA, Kurland KZ: *Milit Med 138*:471-474, Aug 1973. **6.** Feffer HL, Gibbons B: *Med Times 101*(8):130-135, Aug 1973. **7.** Jacobson A *et al*: *Psychophysiology 7*:345, Sep 1970. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 1978. **10.** Kales A *et al*: *JAMA 241*:1692-1695, Apr 1979. **11.** Monti JM: *Methods Find Exp Clin Pharmacol 3*(5):303-326, 1981.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended. Repeated therapy should only be undertaken with appropriate patient evaluation.

Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patient to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

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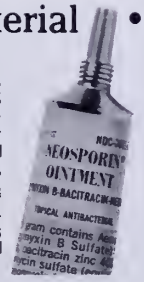

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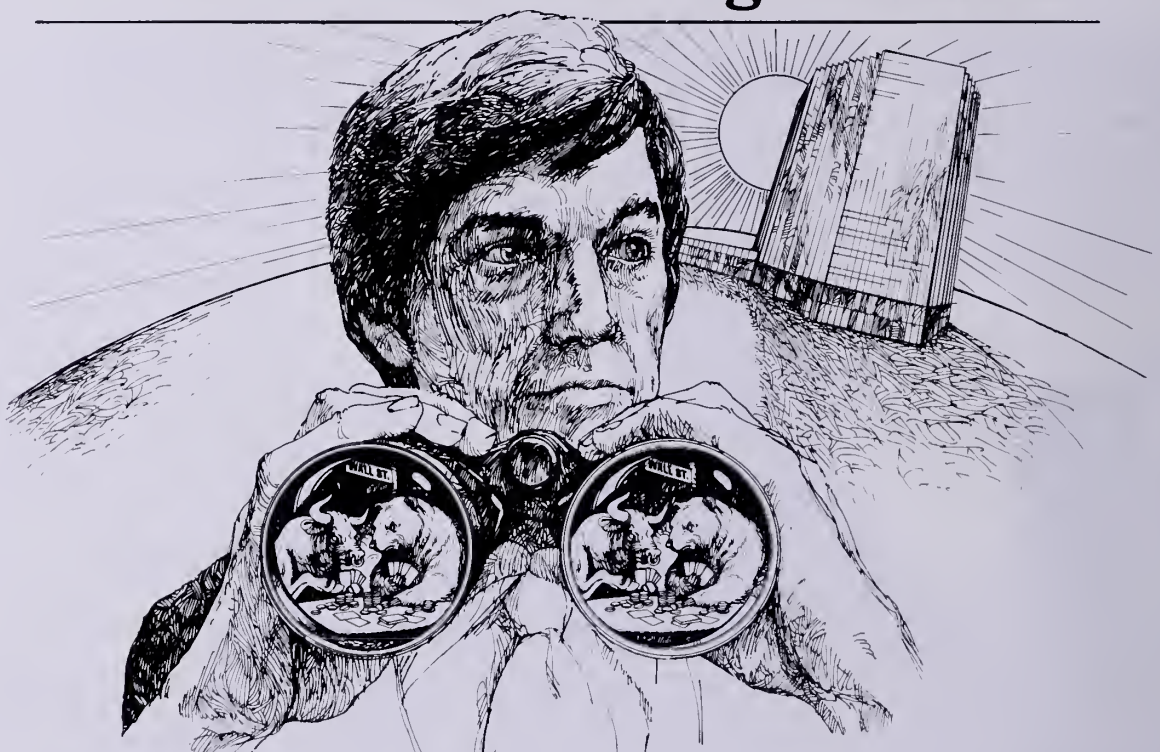

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A Small-Town Independent Birthing Center

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The goal of the independent birthing center is clear-cut: to provide safety and comfort in childbirth for selected patients with minimal intervention and at low cost. According to the author, the results at the Glen Dale (West Virginia) Birthing Center so far are excellent, and point to an expanded use of such facilities in the future.

The past decade has seen dramatic changes in the attitudes toward, and the management of, obstetrical care in the United States. The changes include an increase in the number of out-of-hospital deliveries, the expanded practice of midwifery, and the movement of physicians and hospitals toward accepting and encouraging natural childbirth. These developments constituted a reaction against a pattern that had developed in American obstetrics where mothers were uneducated and unprepared for childbirth, where husbands were relegated to a waiting room for the entire labor and delivery, and where medication, anesthesia and other medical interventions were used routinely instead of being reserved for the complications for which they were developed.

The worldwide movement that began in Europe in the 1940s with such pioneers as Dr. Grantly Dick-Ready[1] and, later, Dr. Ferdnand LaMaze[2] spread to this country in the 1960s as parturient patients insisted on giving birth naturally and without unnecessary interference.[3] Acceptance by the American medical community was slow, but the home birth movement gained steadily as an alternative.[4-9] When many physicians refused to attend home births, midwife training programs multiplied to meet the demand.[10]

A decreasing birth rate in the early 1970s combined with this movement to force the closing of many small obstetrical units and increase the cost of delivering a baby in a hospital. In the later 1970s the hospitals responded with in-hospital birth rooms.[11-17] One other alternative was last to develop: the free-standing, independent birthing center.

One of these was New York's Childbearing Center of the Maternity Center Association, which began operation in 1975.[20] With the cooperation of obstetricians, nurse-midwives, midwife assistants, pediatricians and public health nurses, the goal was to provide a safe and satisfying compromise between home and hospital obstetrical services at a reasonable cost to the patient. The out-of-hospital centers provided an ideal alternative for many patients and obstetrical professionals.

Glen Dale Family Birthing Center

In response to the increasing number of requests for attendance at home deliveries, the idea of a birthing center in this doctor's office in Glen Dale, West Virginia, was born. The first delivery in the office actually was unplanned. A patient arrived in the office in advanced labor and, following uncomplicated delivery in an examination room, declined transfer to the hospital in favor of returning home.

A total of 36 patients delivered in the examining room over a period of three and one half years, during which time the planning, construction and furnishing of the birthing room were

completed. The women who chose delivery in the office were resistant to hospital admission for either philosophical or financial reasons, and many of them chose the office over a home birth only at the doctor's urging.

In spite of the successful and uncomplicated outcomes of these first 36 births, the makeshift environment of the examining room did not provide for optimal comfort or arrangement of equipment. A specially-designed birthing room was the answer.

Founding principles. The motivation to establish the birthing room was fueled by the convictions of the obstetrician, based on his observations of available maternity care, and influenced by patients' demands. The goal was to create a setting where the benefits of both home and hospital could be realized: the continuity and comfort of home but with a wider spectrum of available services.

It was believed that at a reasonable cost, in a controlled yet pleasant environment, the safety of both mother and child could be insured with little intervention or disruption of the family birth experience. The location in the physician's home and office was chosen to enable a maximum level of attention and care to the laboring woman as well as for convenience of the obstetrician.

Community Setting

Community setting. The birthing center is located in Glen Dale, West Virginia, a community of about 2,000 in the northern panhandle, an industrial area on the Ohio River bordering the Appalachian mountains. The population includes a large number of factory workers and coal miners. Glen Dale is bordered on three sides by a sparsely populated rural area from which many of the center patients are drawn.

Available medical obstetrical facilities are limited. There is a small unit in the nearby hospital in Glen Dale. A medical center eight miles from Glen Dale recently has provided an in-hospital birth room. For those who resist delivery in a conventional hospital setting, few alternatives are available. State law requires that midwives may practice only with a formal affiliation with an obstetrician, so few midwives are practicing.

The physical plant. The birthing room complex consists of bedroom, bathroom and kitchenette. The entire suite occupies an area of approximately 15 by 15 feet. Partition walls separate a small bathroom with shower for private use by the laboring mother and her attendant. Along the same wall as the bathroom is a mini-kitchen. Cabinets provide storage space for a few dishes and supplies. The patient brings her own beverages and food, which can be stored in the small refrigerator.

The bedroom is decorated in a neat, home-like style. There is one window facing the foot of the bed. A special Borning* birthing bed is used; it is a standard hospital-size bed with electric controls for raising the head and dropping the bottom section for the delivery. The room also contains a bassinet, sofa-bed and recliner. A night-stand contains extra sheets, Peri-pads, thermometer, sphygmomanometer and the fetal Doppler instrument. Recessed into the wall are a stereo system and color television for diversion during early stages of labor.

Cost $15,000

The room is situated in the center of the doctor's office complex, which comprises the first floor of his three-story home. The main door to the birthing room opens off the main hall and reception area. A second door adjoins the surgery/examination room, where is kept a delivery cart containing sterilized equipment, drugs, basins, gloves, drapes, suction, etc.

Costs. The entire initial cost of establishing the birthing room, including the $7,000-bed, was approximately $15,000.

Policies and procedures. Every effort is made to keep the atmosphere as homelike as possible, permitting maximum comfort and calm for the patient. The staff maintains an observing rather than an active role whenever possible. The husband's presence throughout is encouraged, and participation by other family members is also welcome. Siblings have been found to benefit by presence at the birth, and a support person is required to be present to supervise those under age 12.

The underlying principle of providing care is one of non-intervention with the natural course of childbirth. The patient is in bed only briefly during the first stage, with walking encouraged. She is encouraged to drink soft drinks and juices to maintain adequate glucose levels, and soft foods are allowed in early labor. Ketose sticks are used to monitor blood glucose levels.

Management of Delivery

The delivery is conducted in as quiet and informal an atmosphere as possible, with subdued lighting and sound, according to LeBoyer.[24] The

*The Borning Corporation, Spokane, Washington

cart is brought in only at crowning, and the husband sits at the foot of the bed with the obstetrician. There is little talking during the second stage, and the mother is allowed to control the pushing. The head is delivered slowly, by maintaining head flexion, which allows for drainage as well as for a natural timing for stretching the perineum.

The baby is placed on the mother's abdomen with the head lower to enhance drainage. The husband is allowed to cut the cord when it has stopped pulsating. The placenta is delivered with a final push combined with self-massage of the nipples and gentle pressure on the fundus by the doctor. The husband helps bathe the newborn as the mother receives any necessary attention. The drapes are removed, sheets changed, cart wheeled out and baby weighed in a few minutes by the nursing staff. Then mother, infant and husband are left alone for bonding to continue and a private family celebration.

Results

Population and data. Data were collected on the first 125 patients who delivered at the birthing center. This group includes the 36 patients who delivered before the completion of the birthing room on November 1, 1979. In addition to office records, data were obtained from questionnaires sent to the patients after their return home. The questionnaire response rate for the 36 office patients was 76 per cent, increasing to 91 per cent in the later patients.

Age. The average age of patients was 26 years.

Gravidity and parity. This delivery was the first for 38 per cent of the patients. Eighteen patients (14 per cent) had experienced multiparity greater than three.

Induction of Labor. Labor was induced in 19 patients (15 per cent), in most cases by means of nipple stimulation combined with stretching of the cervix. The latter method was employed in several cases during the course of labor to correct a discordant or slow progress. Pitocin induction or augmentation is rarely used.

Drugs administered. Demerol was given to 27 patients (22 per cent), half of them more than once. Fifty-two patients (42 per cent) were given a paracervical or pudendal block, repeated in about half. General and spinal anesthesia were not available at the center.

Episiotomy and laceration. There were 46 episiotomies performed (37 per cent) and 21 lacerations (17 per cent).

Forceps. Forceps were used to aid delivery in 24 patients (19 per cent).

Complications

Complications of delivery. A nuchal cord occurred in 11 patients, posterior presentations in six, and breech presentations in two. All of these were delivered without further complication, and none required cesarean section.

Third-stage complications. Hemorrhage occurred in nine patients (seven per cent), none requiring transfusion. A retained placenta occurred in six patients, and one suffered partial inversion of the uterus with an adherent placenta. Again, all these irregularities were treated safely in the office without further sequelae. Oxytocics were not administered routinely.

Infants. There were no multiple births, no still births, and no birth defects. Average birth weight was 7 pounds, 14 ounces. Apgar scores averaged 7.7 at one minute and 9.3 at five minutes. Four babies were pre-arranged adoptions.

Description of Patients

In attempting to evaluate any new and innovative health care service, it is important to look closely at the people who use such a facility. An effort therefore was made to determine factors that may have influenced the decision to use this facility.

Marital status. Most of the patients were married (92.3 per cent). Two were separated and, of five single patients, three lived in a marriage-like situation.

Education. The patients as a group were well-educated. Ninety-two per cent were high school graduates, and 25 per cent were college graduates.

Economic considerations. The comparative low cost of delivery at the birthing center was a factor influencing the choice of the center. The average total cost to the patient, including prenatal care and obstetrician's fee, was about $850. The median annual income of birthing center patients was $13,900. Insurance coverage was perhaps a more significant economic factor, as only 26 per cent of patients had full coverage. Twenty-eight per cent had no insurance at all, and 67 per cent had no coverage for the birthing center fee.

Distance of home from center. A point of interest was that the patient lived an average of 24 miles from the birthing center. Compared

with the distance to the nearest hospital, patients travelled three times as far on the average to use the center.

Questionnaires

The information obtained from the questionnaires was used chiefly as feedback in evaluating and improving the facility. The 12-page questionnaire covered in detail patient characteristics, impetus and mode of referral to the center, childbirth education received, and patients' reactions to the center. The following is a summary of responses to some of the pertinent variables.*

Early discharge after delivery. The average length of stay after delivery was 17 hours, ranging from one hour to five days. Most of the patients said they would not have preferred a longer stay.

Support persons. The question of non-staff support persons and their importance to the patient was covered in some detail since participation by family in the birthing event is a main goal of the birthing center. Of married patients, all but one husband was present throughout labor and delivery, and the husband was the *only* person present throughout in two thirds of these.

Eighteen patients had children present during at least part of the labor and delivery, the youngest child being age 2. There was a great variety in the number and relationship of other support persons present, as the decision regarding their presence was solely up to the patient.

Breastfeeding. The questionnaire response showed that 91 per cent breastfed their babies, compared to a 50-per cent national average.

Patient evaluation of the facility. All patients stated that they were satisfied with the support and the skill of the physician and nursing staff at the center. Rated on a scale of 1 to 10, with 10 being "perfect," the average patient rating was 9.6.

Discussion

As the last decade has shown much progress in the area of hospital-based obstetrical care, so one might expect the present decade to provide a continuation of progress outside of the hospitals. Hospital facilities are intended for the treatment of disease, but at least 85 per cent of childbirths are normal and disease free. This report of a small, private birthing center operated by a single physician illustrates that this type of facility can be both medically and financially successful. The establishment of many more of these small-town birthing centers located in the home of the obstetrician or midwife will serve to improve the quality and outcome of obstetrical care, particularly in rural areas where large centers are less accessible.

Some high-risk patients still will need to be referred to the hospitals where the more sophisticated equipment and surgical facilities developed for them are available. These high-risk factors might include breech presentation, cephalo-pelvic disproportion, chronic hypertension or obesity, or history of previous stillbirth or hemorrhage.

The small birthing center should be furnished with the equipment necessary to promote safe deliveries, some of which cannot always be taken to the home. This equipment should include oxygen; IVs with dextrose, lactate and saline; laryngoscope and tubes; suction equipment; forceps; speculum, and drugs such as Pitocin, Ergotrate, lidocaine, Demerol and morphine.

Qualified Personnel Essential

It is essential that the midwives or physicians who operate these centers be experienced and well-trained to handle the occasional obstetrical emergency. There should be a pre-arranged ambulance service available with no delay for transfer to a hospital if necessary. Events such as hemorrhage, prolapsed cord or asphyxiated baby should be handled quickly and expertly by the trained attendant. However, such complications are rare, and the skill of the birth attendant is called for more often in preparing the patient and caring for the normal parturition.

The birthing center concept also allows for more complete continuity of care. The patient sees the same practitioner throughout pregnancy, receives necessary prenatal instruction, returns for the birth itself, and is followed in the postpartum period with care and instruction to include home visits. The obstetrical professional is at hand throughout the entire course of labor and delivery, providing continuing attention to the mother by the same person, a benefit that a hospital cannot provide.

In summary, the goal of the independent birthing center is clear-cut: to provide safety and comfort in childbirth for selected patients, with minimal intervention and at low cost. The results so far reported are excellent, and point to an expanded use of such facilities in the future.

*Complete detailed analysis of 156 births at the unit available on request.

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Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

A short abstract summarizing the manuscript should be included. This should be typed in double space on a separate page.

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All scientific material appearing in *The Journal* is reviewed by the Editorial Board. Manuscripts should be mailed to The Editor, West Virginia Medical Journal, Box 1031, Charleston, W. Va. 25324.

Poisoning By Pit Vipers

LINDA S. DURAND, M. D.
GEORGE T. RODEHEAVER, Ph.D.
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Venomous snakebite is a medical emergency. The local and systemic consequences of this injury are the result of a complex poisoning. It is the intent of this manuscript to describe a medical treatment program for snake venom poisoning that has eliminated the need for surgical intervention at our medical center. The aims of this treatment program are: (1) to minimize absorption of the venom, (2) to remove as much venom as possible, (3) to inactivate the venom, and (4) to treat complications of envenomation. We suggest that these treatment guidelines reported herein be employed in other hospitals in West Virginia and Virginia, and that they be modified appropriately to meet the individual needs of the patient.

In Virginia, snake venom poisoning is a challenging, life-threatening medical emergency that has grave local and systemic consequences. Venom is a complex poison that may rapidly compromise the cardiovascular, respiratory and nervous systems, leading to death.[1] The local effects of snakebite also are serious, and can lead to permanent deformity.

It is fortunate that snake venom poisoning is a rare condition in West Virginia and Virginia. In our medical center, an average of 20 patients with snake venom poisoning are treated each year. This infrequent occurrence does not provide adequate opportunity for most physicians to treat this potentially serious injury.

Experience gained in treating this injury during the last decade at our medical center has demonstrated that the alarming consequences of venomous snakebite can be lessened by appropriate and timely medical care. It is the purpose of this manuscript to describe a medical treatment program for snake venom poisoning that has eliminated the need for surgical intervention at our medical center.

Poisonous Snakes in Virginia

While there are 36 species of snakes in West Virginia and Virginia, only four of them are poisonous.[2] These four species of snakes that belong to the family Crotalidae, or pit viper, account for only five per cent of the snakebites treated in our hospital. On many occasions, the injured victim will be able to describe the snake, or better yet, bring in the dead snake for identification. Examination of the remains of the dead snake must be done with great care since the dead snake has been reported to bite, by a reflex action, an unsuspecting examiner.

Pit vipers are so named because they possess a deep facial pit lined with heat receptors between their eyes and nostrils. These heat receptors are believed to detect the presence of prey and guide the direction of the strike. This is a useful characteristic to search for in identifying poisonous snakes. Other important features include the triangular or arrowhead shape of the head, the elliptically-shaped pupils, the large, freely mobile fangs, and the single row of sub-

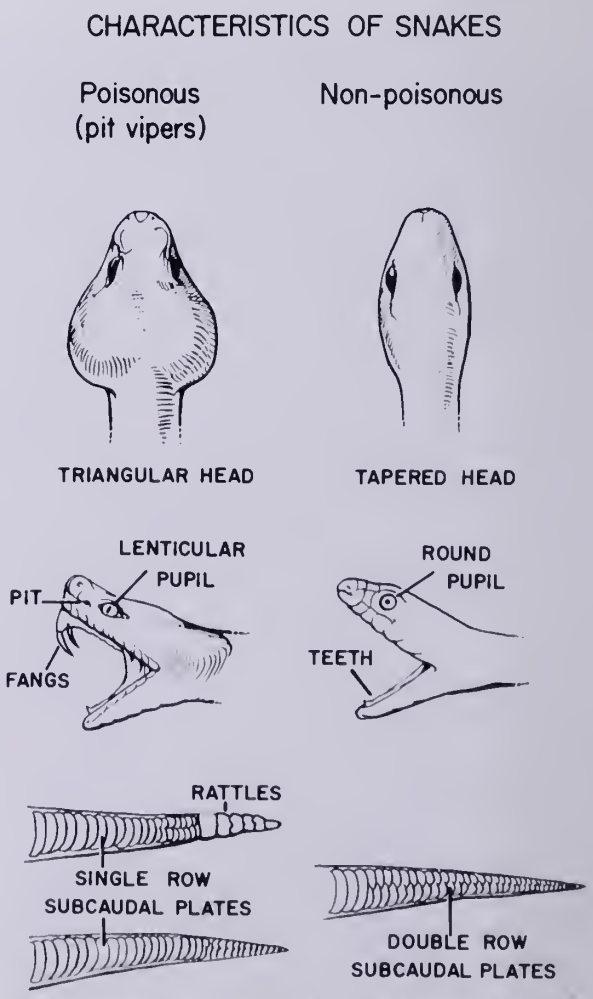

Figure 1. Characteristics of poisonous and non-poisonous snakes.

caudal scutes or scales. In contrast, non-poisonous snakes possess a tapered head, round pupils, small rows of teeth, and a double row of scutes (Figure 1). Rattlesnakes are recognized by their well-known interlocking, horny segments on the tail.

The poisonous snakes in West Virginia and Virginia include the northern copperhead-*Agkistrodon contortrix mokeson*, the eastern cottonmouth (water moccasin)-*Agkistrodon piscivorus piscivorus*, the timber rattlesnake-*Crotalus horridus horridus*, and the canebrake rattlesnake-*Crotalus horridus atricaudatus*.[2] The northern copperhead, whose head is usually coppery color, has hour-glass patterns of dark or reddish brown on a background of light brown to reddish grey. The eastern cottonmouth is a drab snake with dark, wide brown-olive or black cross-bands on a lighter background of the same colors.

The timber rattlesnake has two color phases, a black phase and a yellow phase. In the black phase the snake has a black head and posterior third of the body. The middle two thirds have dark chevrons and saddles on a lighter background. The yellow phase has a pattern of black or brown chevrons and saddles and a black tail. The canebrake rattlesnake looks similar to the yellow phase timber rattler, but has additional features of dark reddish strips in the middle of its back and a dark stripe running from its eye through the back of its jaw to its belly.

Pathogenesis

The major consequences of snakebites are the result of envenomation. The fangs penetrate the skin allowing the venom to be injected into the superficial subcutaneous tissue. The venom is a complex poison consisting of mixtures of pharmacologically-active substances, mainly proteins.[3] Crotalid envenomation can be characterized by local effects and toxic systemic reactions. The presence of one or more fang marks identifies the site of envenomation, which is usually located in an extremity. Fortunately, the large majority of pit viper bites do not lead to envenomation. In those cases in which the venom is injected into the subcutaneous tissue, it exerts a necrotizing effect on the cells, lymphatics and small blood vessels.

Usually, progressive swelling and pain are encountered within an hour. Occasionally, the development of pain and swelling may be delayed, giving the physician a false sense of security. Ecchymosis due to the destruction of red blood cells occurs in the skin at the site of the bite within a few hours. Vesicles may form anywhere along the extremity within hours and are usually present at 24 hours (Figures 2a, 2b). Hemorrhagic blebs and petechiae are common.

Subfascial envenomation *rarely* occurs. In this unusual circumstance, hemorrhage develops rapidly which, when combined with the edema, causes an increase in the muscle compartment pressure to a level which might embarrass its circulation. This resulting ischemia limits access of an intravenously-administered antivenin.

Small amounts of venom and digested cellular substances are absorbed, resulting in systemic manifestations. Nausea and vomiting occur early due to the action of toxins. The venom results in injury to the intimal lining and blood cells, and defects in coagulation. Pulmonary edema is common in severe envenomation, and bleeding may occur throughout the body. Blood-tinged secretions may exude from every orifice. These changes are accompanied by changes in renal and cardiopulmonary function. Death may ensue within 30 minutes. The Crotalid venoms produce relatively minor changes in neuromuscular transmission that include periorbital and perioral

Figure 2a. Hemorrhagic blisters occurred in an edematous hand that was bitten by a timber rattlesnake.

fasiculations, or numbness or tingling of the tongue, mouth, scalp, or feet.[4]

Management

The aims of management of snakebite are to minimize absorption of the venom, to remove as much venom as possible, to inactivate the venom, and to treat complications of envenomation. Absorption of the venom can be reduced by the use of a constricting band as well as immobilization of the injured extremity. A constricting band should be applied 10-20 cm. proximal to the pit viper bite of an extremity. If the bite lies near the joint, it should be placed proximal to the joint. The constricting band should occlude superficial venous and lymphatic return but, be loose enough to preserve a distal pulse. This can be accomplished by an encircling string that only dents the skin or a rubber constricting band which is loose enough to place two fingers beneath comfortably.[5]

The injured extremity also should be immobilized in a splint that permits swelling of the soft tissue. The immobilized limb should remain at the level of the heart. Elevation of a bitten extremity encourages movement of edematous fluid proximally. This progressive swelling of the limb may be viewed by the inexperienced clinician as advancement of the disease rather than simple gravitational effects.[6]

Figure 2b. Hemorrhagic blisters occurred in an edematous hand that was bitten by a timber rattlesnake.

Incision and suction of the bite should be performed if less than 60 minutes have elapsed since the viper bite.[7] In this event, make three- to six-mm. linear parallel incisions through the fang marks. In the extremities, the incisions should be in a longitudinal direction since they are less likely to result in damage to underlying structures than transverse incisions. The incision must extend only through skin and *not* penetrate subcutaneous tissue or fascia. Cruciate incisions are not advocated since they result in devitalized skin edges. Incision over finger and toes or large veins or arteries should be avoided. Suction by cups provided in a snakebite kit should be applied and continued for one hour or until antivenin is administered.

If the patient exhibits clinical signs of envenomation, blood should be drawn from an uncannulated vein for type and crossmatch, complete blood count including platelet count, coagulation studies including prothrombin time (PT), partial thromboplastin time (PTT), fibrinogen level, fibrinogen-fibrin split products and clot retraction as well as electrolytes, blood urea nitrogen and bilirubin. Baseline arterial blood gases should be obtained. A urinalysis should be performed, searching for red blood cells.

Circumference Measured

The circumference of the injured extremity should be measured at the level of the bite and four cm. proximal to it every 30 minutes. Vital signs and urine output should be monitored repeatedly at 30-minute intervals. The findings of diminished serum fibrinogen levels, prothrombin activity and thrombocytopenia are relatively common in patients with envenomation from pit vipers. These laboratory results are often associated with continuous oozing from the fang marks and/or hematuria.

The most important treatment of envenomation is antivenin. The decision as to whether this treatment is initiated is dependent on the severity of envenomation. Many factors influence the severity of envenomation, including the location and number of bites, the amount of venom injected and the size and species of the offending snake. In general, envenomation of the digits requires more antivenin than other sites. A simple grading system has been devised to judge the severity of envenomation, and is shown briefly in the Table.

TABLE
Severity of Envenomation

Grade	*Fang or Tooth Marks*	*Size of Edematous or Erythematous Skin Zone*	*Systemic Involvement*	*Antivenin (No. Vials)**
0	+	2 cm	−	0
I	+	2-15 cm	−	5
II	+	15-30 cm	+	10
III	+	30 cm	+	15
IV	+	2 cm	+	15

*This dosage may be inadequate for treatment of some Crotalid envenomations.

Antivenin is required for Grades I, II, III and IV envenomation. Once it is determined that antivenin is necessary, there should be no delay in its preparation and administration. Antivenin therapy should be accomplished in a critical care setting where the patient's condition can be closely monitored.

A high percentage of the patients who receive antivenin develop serum sickness, and an appreciable number suffer radiculitis, neuropathic syndrome or anaphylaxis. In those patients with no history of allergies to horse serum, testing for sensitivity to horse serum is mandatory. This testing is accomplished by administering 0.02 to 0.03 ml. of a 1:10 dilution of horse serum or antivenin intracutaneously into one forearm with 0.9-per cent sodium chloride being used as a normal control in the other arm.[8] Use of larger amounts for the skin test dose increases the likelihood of a false positive reaction and, in the exquisitely sensitive patient, increases the risk of a systemic reaction from the skin test dose. A 1:100 or greater dilution should be used for preliminary skin testing if the history suggests sensitivity.

Occurs Within 30 Minutes

A positive reaction to the skin test occurs within 30 minutes and is manifested by a wheal and surrounding erythema. If no local reaction occurs within the first 30 minutes after skin testing, the antivenin can be administered intravenously. It is important to remember that a negative reaction to this hypersensitivity test does not completely rule out the chance of hypersensitivity developing. Consequently, one must be prepared to treat anaphylaxis when antivenin therapy is begun.

Sensitivity testing should only be accomplished in patients who are candidates for antivenin therapy. Skin testing of patients with no local or systemic sign of Crotalid envenomation (Grade 0) is *contraindicated* since skin testing by itself may sensitize the patient to horse serum. This sensitization may complicate treatment of this patient for envenomation in the future. In addition, conjunctival skin testing is not recommended.

Antivenin is most effective when administered intravenously.[9] It should be administered intravenously through a venous catheter in an unbitten extremity. A second vein should be cannulated in another unbitten extremity to permit access for volume expanders. The antivenin is prepared by reconstituting the lyophilized antivenin with the 10 ml. of bacteriostatic water provided in each kit. The reconstituted antivenin is then injected into 500 cc of 0.9-per cent saline solution for intravenous therapy.

Antivenin is infused into a superficial vein very slowly at the beginning. If no reactions occur within the first five minutes, the remainder of the fluids may be given rapidly over the first hour. One can titrate the amount of antivenin that is needed by monitoring the progressions of the local reaction (circumference of extremity) and the systemic manifestations, and by observing the point at which progression ceases. When neutralization of venom is achieved, local reactions will stabilize, bleeding diastheses will be arrested, and the patient will have a sense of well being: gastrointestinal symptoms will cease and there will be a decrease in local pain.

Grade I envenomation usually takes five vials; Grade II, 10 vials, and Grade III and IV, 15 vials the first hour. The need for additional antivenin should be based on the clinical response to the initial dose and continuing assessment of the severity of the poisioning. If swelling continues to progress or if systemic symptoms or signs of envenomation increase in severity or if new manifestations appear (e.g., fall in hematocrit or hypotension, etc.), five vials can be administered intravenously as often as every 30 minutes to two hours.

Varying Amounts

In rare, life-threatening envenomation, the rate of administration of antivenin may have to be increased above that already recommended. Children and small adults require relatively more antivenin since they receive more milligrams of toxin per killogram of body weight than normal adults and have less resistance and less body

fluid with which to dilute the venom. Poisoning by water moccasins (cottonmouth) usually requires lesser doses than rattlesnake bites, whereas in copperheads, antivenin is rarely required except for children and the elderly. Antivenin therapy also should be considered in copperhead envenomation of the face which may result in considerable edema that may embarrass the patient's airway.

The chief immediate danger of antivenin is anaphylactic reaction. The development of this early complication is usually associated with a positive skin test; however, patients with positive tests frequently do not suffer anaphylaxis. Wingert and Wainschel report a procedure used in their medical center which reduces the likelihood for anaphylaxis in some severely envenomated patients with positive sensitivity tests who receive antivenin.[8] Fifty to 100 mg. of diphenhydramine hydrochloride (Benadryl) is administered, after which antivenin is given slowly intravenously over a 15- to 20-minute period while watching for signs of anaphylaxis. If anaphylaxis does *not* occur, the antivenin is continued at a faster rate, still closely observing the patient.

A later and frequent complication of antivenin therapy is serum sickness. Its development cannot be predicted by sensitivity tests, and its severity is not directly related to the dose of antivenin injected. Symptoms begin one to two weeks following antivenin therapy in individuals not preveiously exposed to the antivenin.

Shock, Coagulopathy

While the antivenin is being administered, the local and systemic consequences of envenomation also must be managed. Pooling of blood in the pulmonary circulation with reduced peripheral blood flow is the suggested immediate cause of shock in the victim of envenomation. Coagulopathy is a frequent, but later, complication of envenomation occurring 12 to 72 hours after the bite. This development results in blood loss from hemorrhage as well as by lysis of red blood cells. Correction of this problem requires the administration of fibrinogen, procoagulants and fresh blood.

Snake venoms are allergenic, and sensitization may occur.[10] Fortunately, hypersensitivity with anaphylaxis to snake venoms occurs rarely — usually, but not exclusively, in persons previously bitten or sensitized to snake venom in some manner. Clinical allergic reactions may manifest themselves as conjunctivitis, rhinitis, generalized pruritis, asthma, or laryngeal edema.

The wound should be cleansed of bacteria and/or soil infection potentiating fractions using either high pressure irrigation or a mechanical scrub with a nontoxic detergent such as 20-per cent solution of Pluronic F-68.[11] When edema develops around the snakebite, the normal overlying skin stretches and accommodates to expanding underlying tissue. Consequently, the circulation to the extremity is *rarely* embarrassed. The unusual circumstance of vascular insufficiency can be detected by progressive loss of sensation and impaired joint proprioception. These suspected changes in blood flow can be confirmed by the Doppler flowmeter.[12]

The subject of early excision of the tissue around the fang wounds remains a controversial issue. Advocates of local excision and fasciotomy suggest that these modalities may decrease the incidence of systemic manifestation and limit the need for antivenin therapy as well as to prevent local tissue necrosis.[13,14] Russell *et al.*[1] discourage the use of fasciotomy, having not observed the need for it in the early management of more than 600 cases of snake venom poisoning.[1] The staff of our medical center have had the same gratifying results with antivenin therapy as reported by Russell, and have not resorted to fasciotomy.

Infection is an occasional complication of snakebite developing usually in the presence of tissue necrosis. Fatal cases of gram negative septicemia also are known.[3] Studies of the oral flora of North American pit vipers have shown the presence of the potentially pathogenic *Clostridium* species, except *Clostridium tetani*, and gram negative bacilli such as pseudomonas, proteus and enterobacter.[15,16] Consequently, antibiotic(s) with a spectrum of activity that includes these gram-negative facultative organisms and obligate anaerobic bacteria should be administered intravenously. Antibiotic treatment must not be delayed to insure optimal therapeutic benefit.[17]

Fatal cases of tetanus have been reported following snakebites.[3] The source of this pathogen probably is dirt rather than the fang since *Clostridium tetani* has not been recovered from the oral flora of snakes. Tetanus prophylaxis is advisable for all snakebites. Guidelines for administering passive and active immunization to the patient with a laceration have evolved over the last 20 years with the introduction of human tetanus immune globulin and the increasing knowledge of the immune response to fluid and absorbed tetanus toxoid.[18] Rabies virus is not transmitted by the snake.

Treatments to Avoid

Cryotherapy should never be employed as a method of treatment of snakebites.[19] This once-proposed method entertained the erroneous opinion that the activity of all potentially deleterious enzymes in snake venom can be reduced by cooling. However, efforts to cool envenomated extremities have shown to contribute to local tissue damage rather than inactivating harmful enzymes.

Steroid therapy also has no apparent therapeutic benefit, except for anaphylactic shock. According to Clark, steroids did not affect the survival rate of animals poisoned with pit viper venoms.[20] Rather, it has been our distinct clinical impression that they can be harmful.

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Special Article

Giants In The Hills: A Brief History Of The West Virginia Chapter, American College Of Surgeons

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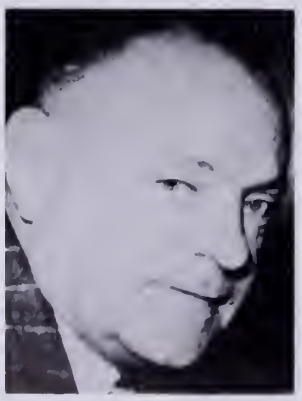
This paper was presented during the April 30-May 3, 1980, Spring Meeting of The West Virginia Chapter, American College of Surgeons, at The Greenbrier in White Sulphur Springs. On that occasion, a John O. Rankin Presidential Gavel was presented to the Chapter, to be passed on from President to President. An identical gavel was presented to Doctor Rankin, a Wheeling orthopedic surgeon who was elected as the Chapter's first Vice President in 1951; and who served as the American College of Surgeons' Governor for West Virginia in 1955-61. The gavels carry this inscriptions "To John O. Rankin, Founding Member and Leader, West Virginia Chapter of the American College of Surgeons, distinguished surgeon, loyal colleague and staunch friend, in gratitude for years of unwavering service, from your friends, the Fellows of the West Virginia Chapter of the American College of Surgeons."

In 1933, the Great Depression was upon the land, and many activities and programs no longer were possible. Among the many programs cancelled indefinitely that year were the sectional scientific meetings developed by the American College of Surgeons, and held every spring at various locations around the country.


Hugh A. Bailey, M. D.

In August, 1932, Dr. R. J. Wilkinson of Huntington had written to Dr. Franklin Martin at the American College of Surgeons in Chicago, stating that Dr. Oscar Biern of Huntington, a member of the American College of Physicians, had suggested having a College Fellowship Meeting in West Virginia. "His idea was that both the American College of Surgeons and the American College of Physicians have many things in common, and it would be well to discuss the problems that are now arising in our state. At these meetings it would be most desirable to have a representative from both colleges."

Doctor Martin replied that "there is no objection to the West Virginia Fellows of the American College of Surgeons having a local chapter. Fellows of the College have organized local chapters in several states. You understand this chapter should be of Fellows of the American College of Surgeons and should not include Fellows of the American College of Physicians, but, of course, there would be no objection to your inviting to your meetings the Fellows of the American College of Physicians. Inasmuch as local chapters have no administration, judicial or executive functions, it does not seem necessary to have a constitution and by-laws as such, but rather to follow a simple procedure in the annual election of officers and conduction of meetings."

John O. Rankin, M. D.

On January 14, 1933, Dr. Ben Golden of Elkins corresponded with Dr. Ben O. Robinson of Parkersburg and sent a carbon copy of the letter to Doctor Martin, Director General of the American College of Surgeons. Doctor Golden stated that he understood the reason for the cancellation of the sectional meeting, but went on to explain:

"However, we here in West Virginia have a reason for wanting the sectional meeting, which the College probably does not understand. Two years ago we started the West Virginia Fellows get-together at the state medical meetings. I believe in the two years we have seen a feeling of

fellowship develop which is most important. I doubt if the fellows in any other state have a closer feeling towards one another. At St. Louis, I believe we had as large and representative a group as any other state that must travel some distance to get to the meeting. We have been more or less in accord in the state survey.

"In short, by this simple procedure we have become a little organization. I feel that it is very important to hold the group together now more than ever. With the problems of depression, the increase of malpractice suits, and the reactions to the Committee on Medical Costs, we of this state should make every effort to hold the spirit that now exists. And last but not least, I feel this spirit and the cooperation of the Fellows will make the Fellows of West Virginia stand for something in the eyes of the public.

"Therefore, may I suggest to you as Chairman of the state that you talk this over with Doctor Fulton (I mention him especially since he wanted the meeting in Wheeling) and others, and every effort be made to hold a meeting of some type for the West Virginia Fellows if for nothing more than to say 'hello,' forget the depression for a few hours and talk over our problems."

87 Fellows in 1933

There were 87 Fellows of the American College of Surgeons in West Virginia in 1933. Doctor Golden's covering letter to Doctor Martin went on to say "We of West Virginia have at present some real problems facing us, and I believe it is a good thing to keep the members of the College together. Our industrial situation is going to cause some trouble ere it is ironed out. There will probably be some feeling arise between the profession and the mine operators. This, of course, will have to reflect on the "company" doctor . . . so that for some time to come things will be uneasy. The Fellows of this state have developed a fine spirit of cooperation—therefore I hate to see any opportunity lost whereby this can be continued!"

The efforts apparently died at this point. The records indicate that the Fellows continued to meet with the State Medical Association.

On January 19, 1951, Dr. H. P. Saunders, Associate Director of the American College of Surgeons, wrote to Dr. William R. Laird of Montgomery, West Virginia. Doctor Laird was the Governor from West Virginia to the American College of Surgeons. The following is a quote from Doctor Saunders' letter:

"You are aware of the enthusiasm of the Board of Governors of the College concerning the organization of local chapters where they do not already exist. This enthusiasm of the Governors is shared by the Board of Regents and I have been authorized to assist with the organization of these chapters.

"It is highly desirable that the chapters be essentially uniform in organization, except for minor deviations which may be necessary to accommodate local situations peculiar to certain areas. Consequently, it is the desire of the College that each Chapter should adopt uniform bylaws (*20 years brought some change, authors' note*), except for possible minor differences to suit local situations, and that after adopting these bylaws the chapter apply to the College for a charter. These charters will be issued on approval of the Board of Regents.

"The decision as to whether one chapter should be organized for an entire state, province, county or district, or whether a region should be sub-divided for smaller chapters, depends on advice from the area concerned, but our present information indicates that it would be well to have one chapter to include the State of West Virginia."

On January 23, 1951, Doctor Laird replied to Doctor Sanders: "There is a great deal of enthusiasm in West Virginia about establishing this chapter of the American College of Surgeons. I have already discussed the matter with Doctor Myers. Before long you will be hearing from us."

State Chapter Formed

The Fellows of the American College of Surgeons gathered at the Greenbrier Hotel during July, 1951, for the meeting of the West Virginia State Medical Association. The Honorable Okey Patteson was Governor, and he had many statewide problems, including the question involving location of the new medical school. Action was indeed taken. On July 23, 1951, Ms. Ruth M. Anderson, secretary to Doctor Laird, wrote to the secretary of Dr. Paul R. Hawley, Director, American College of Surgeons: "We are embarrassed. Doctor Laird took the A.C.S. Folder out of the file and has misplaced it. Would you be good enough to let me have the bulletin covering the subject of the State Chapters of the American College of Surgeons? Last week, the State Chapter was formed during the meeting of the West Virginia State Medical Association at The Greenbrier. Doctor Laird thought, of course, that Doctor Bailey, the Chairman, would have his folder with him, but unfortunately he did not. Doctor Laird is afraid that things were done in

an unorthodox manner, but he is getting right after this Chapter and thinks they will give you one that you will be proud of."

On July 24, 1951, Dr. W. W. Scott of Williamson wrote Doctor Saunders stating that the organizational meeting was held at White Sulphur Springs on July 19, 1951. Doctor Laird was in charge of this meeting. Dr. Hugh A. Bailey of Charleston was elected President, and Dr. W. W. Scott was elected Secretary. A return letter by Doctor Scott gave the full roster on August 8, 1951. In addition to Doctor Bailey as President and Doctor Scott as Secretary, Dr. Henry M. Hills, Jr., of Charleston, Dr. Frank Langfitt of Clarksburg, and Dr. John O. Rankin of Wheeling were elected Councilors.

On November 29, 1951, the officers of the West Virginia Chapter met in Charleston. They elected Doctor Rankin as Vice-President, in addition to his duties as Councilor. They called their first meeting for the first week in April, 1952, at The Greenbrier Hotel, and accepted $250 from Doctor Laird to be used as prizes for the three best surgical papers written and presented by the residents from approved hospitals in the state.

Charter Granted

On February 14, 1952, Doctor Saunders wrote Doctor Scott stating that the Board of Regents had granted the request for a Charter for the West Virginia Chapter of the American College of Surgeons.

In the next mail from the Board of Regents of the American College of Surgeons came Charter No. 29, granted the 19th day of July, 1951, by Everts A. Graham, Chairman of the Board of Regents, and Michael L. Mason, Secretary of the College.

"The organization of Fellows under this charter shall be known as the West Virginia Chapter of the Fellows of the American College of Surgeons," it said.

Who were these men who established the Chapter that bright and optimistic July? The room rates at the Greenbrier Hotel were $19 double occupancy, American Plan. A new Ford was $1,100, including automatic transmission. "Sound as a dollar" meant respect, not laughter.

Doctor Laird was Governor of the American College of Surgeons from West Virginia, 1948 to 1954. He was the surgical leader who interacted between the Fellows of the College in the state and the Chicago Office. He was born in Nicholasville, Kentucky, on June 28, 1890, and his father was a minister. He spent his early life in Danville, Virginia.

Doctor Laird was graduated from Washington and Lee University, and received his M.D. degree in 1914 from the Medical College of Virginia. He served his internship at the Sheltering Arms Hospital in Hansford, Kanawha County, in 1914-15. He served as Chief of Surgery in that hospital from 1916-1919 before establishing the Coal Valley Hospital and the Montgomery Clinic.

Doctor Laird then served as Chief Surgeon at that hospital until 1938, when he founded the Laird Memorial Hospital, and two years later the Laird Foundation, a non-profit organization set up for charitable, scientific, benevolent and educational purposes. He became a Fellow of the American College of Surgeons in 1923, and was appointed Governor for the state in 1948. He was in the Founders Group of the American Board of Surgery, 1937.

Recipient of Award

The Montgomery surgeon received the Distinguished Service Award of the American College of Surgeons in 1958; a citation for outstanding service by the West Virginia Chapter of the American College of Surgeons in 1961, and the Presidential Citation from the West Virginia State Medical Association that same year.

He received honorary degrees from Waynesburg (Pennsylvania) College; West Virginia Institute of Technology; West Virginia Wesleyan; Hampden-Sydney (Virginia) College, and the Medical College of Virginia in Richmond.

His citation by the West Virginia Institute of Technology reads: "Distinguished surgeon, philanthropist, humanitarian, encourager of research, sympathetic observer of world affairs, widely traveled in the land, pioneer in the promotion of adequate medical care for all, donor of a large fortune to the Laird Foundation, an organization devoted to the relief of suffering and the encouragement of research, held in esteem by his fellow citizens of all creeds, races and conditions." Doctor Laird died on March 5, 1963.

Doctor Bailey was born in Vass, North Carolina, December 4, 1901. A graduate of Davidson College, he received his M. D. degree from the University of Maryland in 1928, and served his internship and residency at the University Hospital there. He moved to Charleston and set up practice in 1933, serving on the staff of the Charleston General Hospital, and consulted at other hospitals in Charleston. He was a Fellow of the American College of Surgeons and the Southern Surgical Association. He died at the age of 57 of complications following surgery for cancer of the lung.

The Secretary, Doctor Scott, was born in Williamson in 1912. He attended Marshall College, West Virginia University and the University of Alabama, and then took his medical degree from the Medical College of Virginia in 1938. He interned at St. Joseph's Hospital in Lexington, Kentucky, where he worked for an additional year with Dr. Fred O. Rankin.

Returns to Williamson

At this point, he was persuaded to return to Williamson, where he served as hospital Chief Surgeon. He said he would read about the operation, and then do it. He practiced for a short time in Oak Hill, West Virginia, but soon moved to Portsmouth, Ohio. Within the year, however, he returned to Williamson as Chief Surgeon and Director of the Williamson Memorial Hospital. He became a Fellow of the American College of Surgeons in Cleveland in 1946, and he remembered that it was bitterly cold in Cleveland that fall. He remained at Williamson until 1963, when he retired to Tempe, Arizona, where he is presently living.

Doctor Hills was born in 1913 in Lamoni, Iowa. He took his undergraduate and M. D. degrees from the University of Iowa in 1937, and served as intern and assistant resident at the University Hospital there from 1937-1939. Doctor Hills then served as an orthopedic resident at the Charleston General Hospital in 1939-40, and at the Massachusetts General Hospital in 1941-42. He was a Captain in the Army Medical Corps, 1942-1945. He returned to Charleston after the war, was board certified in orthopedic surgery, became a Fellow of the American College of Surgeons, and continues to practice in Charleston.

Doctor Langfitt was described by his peers as "a real gentleman." He was born in 1883, took his M. D. degree from the University of Maryland, and moved to Salem, West Virginia, in November, 1908. He moved his practice to Clarksburg in 1918. Soon after this, he spent some time in surgical training in Baltimore. He became a Fellow of the American College of Surgeons in 1935. He was very active in medical affairs both in the State Medical Association and the American College of Surgeons. He was also very active in civic and industrial activities in Harrison County. He led a long and productive life, dying in December, 1972.

Doctor Rankin was born in Cambridge, Ohio. He took his M. D. degree from Jefferson Medical School in 1922, and interned at the Ohio Valley Hospital in Wheeling before returning to the University Hospital at Jefferson in Philadelphia for a year of orthopedic training. He then spent a year in New York at the Special Disease Hospital, called at that time the Hospital for Ruptured and Crippled and Reconstruction. In 1926, he joined the surgical staff at the Ohio Valley Hospital.

Studies in Vienna

Doctor Rankin became a Fellow of the American College of Surgeons in 1928. He took a year off in 1929 to study at the Bochler Clinic, a world famous fracture clinic in Vienna. He said he learned to speak "some Deutsch" then. After returning to the United States, he spent time in orthopedic training at the University of Michigan. From 1929 through 1941, he practiced surgery and orthopedics at Ohio Valley Hospital.

Doctor Rankin was a Commander in the U. S. Naval Reserve from 1942-46. During this time, he was Chief of Surgery and Orthopedics at the U.S. Naval Hospital in Memphis. He finished his naval career at Norfolk, Virginia, and returned to Wheeling to practice orthopedics, which he continues today. He was elected Vice-President and Member of the Council at the founding meeting of the West Virginia Chapter of the American College of Surgeons, and was appointed Governor for the state from 1955-1961.

The history of the founding of the West Virginia Chapter of the American College of Surgeons is best summarized by a quotation from Thomas Carlyle (1795-1881): "History is the essence of innumerable biographies."

A message from . . .

The President

THREE?

THE President's Page is just that, the President's Page. The page of our Association's *Journal* wherein each month the President of the Association can express his opinion on subjects of his choosing. An opinion that does not necessarily reflect or does not necessarily represent the official view of the Association, but an opportunity for the State President to address issues which he feels are of concern and interest to the members.

During the ensuing months since last August, I have tried to select issues which I felt were of interest and concern to our members. Few, if any, have been so controversial as the subject I am addressing this month—three medical schools.

As all of you know, probably no other state in this country has the number of medical schools on a population basis as does West Virginia. To discuss how we came to have three schools possibly would be of some relevance, but the situation in our state has changed a great deal since that decision was made, and it would serve no purpose at this time to discuss it further.

The question before the people of West Virginia now is: Do we need three medical schools, and can we afford three medical schools? This is a decision the Legislature ultimately will have to make. It is a decision which will require input from all segments of our state. One segment that is of particular concern to me is composed of the physicians of this state and the State Medical Association.

Should we as individual physicians and as an organization take a stand on this issue? I think we should, and we must, take a stand. It is of vital interest to the state and to us as physicians. We are all concerned with medical education, medical manpower and the cost of same. Should we not be concerned, then, with the effects of three medical schools on medical education, manpower and the cost of this to the people of the State of West Virginia?

We should, therefore, as an Association, study the issue thoroughly and be in a position to advise the State Board of Regents, the Legislature and the Governor of our stance. We should be in the forefront on a matter as important to our state and its people as this is. If our stand is to take no stand, because it possibly is a controversial issue within our own Association, then we should not be disturbed or disappointed when our opinion as an organization is not sought or accepted on other health-related issues.

We all have seen and admired other organizations that were willing to take a stand on issues, whether or not we agreed. I think we must be prepared to do this. Our expertise demands it: the people of West Virginia deserve it.

John B. Markey

John B. Markey, M. D., *President*
West Virginia State Medical Association

The West Virginia Medical Journal

Editorials

The Publication Committee is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author shall be held entirely responsible. Editorials printed in The Journal do not necessarily reflect the official position of the West Virginia State Medical Association.

SOBER CONCERNS

Comments by leaders in medicine across the nation, as expressed through such avenues as medical journals, reflect a sober, consistent awareness of cost and other challenges faced by physicians and this nation's system of patient care. Let's look at a cross-section of such observations.

"It is very distressing that the consequences of the finest medical care in the world is the high cost of this care. There are simple measures that can be taken, such as changes in the reimbursement plans to hospitals by insurance companies and . . . deductibles in the health insurance plans. I hope cooperation among all parties will result in medical cost containment without sacrificing quality of medical care. If this is not done, I can foresee another federal regulatory agency being born which will affect patient care adversely and create social and political turmoil!"—Duncan S. Owen, Jr., M. D., Virginia.

"It will behoove all of us to practice more efficiently. There will be further leveling off if not a reduction in monies for Medicare, Medicaid and other government-funded health programs. First-dollar coverage by public and private third-party payors will soon become a thing of the past. I believe we will see our patients more and more asking what something costs and what we can do as a less costly alternative. If it is true as some say that people will consume as much health care as someone else will pay for, then we can expect the opposite of this when the 'someone' starts paying less."—R. Faser Triplett, M. D., Mississippi.

"We are truly living in an era of rapid change. So rapid, in fact, that at times we find ourselves doubtful about the future. I am confident we can meet any competitive challenge the future holds providing we determine accurately the needs of our patients and plan accordingly, and then implement programs to meet those needs. Marketing will not be a 'foreign' concept in the future. It will become an integral component of our practices."—Charles J. McCarthy, M. D., Minnesota.

"The patient's best advocate, both in and out of the hospital, is the physician. Hospital problems will not be solved by business principles alone. By keeping the perspective of patients' welfare foremost, however, we may at least be able to extricate ourselves from some of our fiscal dilemmas and make the decisions which will protect our hospitals as institutions dedicated to the care of the ill. For this purpose, physicians' views are essential on hospital boards of trustees, and hospital medical staff organizations must speak out. We owe it to our PATIENTS to be heard." — Charles E. Millard, M. D., Rhode Island.

"In my opinion, there is no other arena where our profession and our patience can lose more or win more than the political/legislative arena. And yet far too many physicians fail to appreciate the vast legislative efforts on the part of organized medicine. Physicians emphasize the importance of 'representation' in Washington, but some are not willing (we know they are able) to pay their fair share toward their representation through membership dues."—Fred C. Rainey, M. D., Kentucky.

And now on the lighter side: "My first great decision was to marry my first wife, Doris. After this past year (as Oklahoma State Medical Association President) and 38 others, we are still holding hands. If we ever let go we may kill each other."—James B. Pitts, M. D., Oklahoma.

STRONG PROGRAMS

With the lead story in this issue's news section, *The Journal* completes the lineup of speakers and topics for August 27 and 28 forenoon general scientific sessions scheduled as part of the Medical Association's Annual Meeting at The Greenbrier.

Those two programs will offer challenging, current and highly valuable information for the general practitioner as well as specialists in several fields. A shoehorn might be required to get all of the presentations completed in limited time available.

But the scientific offerings at The Greenbrier will not stop with the two general sessions. As the August *Journal* will enumerate, in a presentation of the complete convention program, specialty sections and societies once more have put together an impressive array of again current subject matter.

It has been no accident that attendance generally has picked up over the last two years or so at the section and society breakfast, luncheon and other meetings. Many physicians have put major efforts into fashioning good, solid scientific programs combined, in some instances, with business sessions.

As the final program format will show, section and society subject matter will range from updates on breast cancer and otitis media to alcoholism as a disease, urological emergencies, peptic ulcer therapy and practical tips in diagnosis of viral diseases.

There are other scheduled topics, of course, with the result that those seeking information and valuable insights into treatment of patients will have no trouble finding areas of interest. In fact, the difficult problem might be one of choosing just where to go when.

The Medical Association's House of Delegates, through adoption of some bylaws changes and other action in recent years, has set new and expanded goals for the specialty sections and societies. To meet those House expectations, those groups must step up their continuing medical education efforts.

For most, there is still a ways to go. All efforts logically can't be centered at Annual Meeting-related sessions. But there has been good overall progress—with, in fact, some of the organizations further strengthening already established programs.

For the physician, and for the patients for whom he or she provides care, these are healthy signs. Now more fuel needs to be added to the fire.

A FAIR LAW

In view of West Virginia State Medical Association support of 1981 child restraint legislation, the following letter to the Editor of *The Morgantown Post* is reprinted to emphasize a number of significant points it contains.

"TO THE EDITOR:

"As professionals involved in the care and management of patients hospitalized in the Intensive Care Unit, we frequently see many people who have been seriously injured as the result of automobile accidents. Probably one of the most distressing types of patient is the infant or small child who has suffered extensive head or brain injury from being tossed about the automobile at the time of impact. The time is past due to put an end to this senseless destruction.

"In 1981, the West Virginia legislature passed into law a regulation mandating that all persons engaged in the usual transport of children under the age of five years be required to transport in an infant or child seat. However, this law is widely ignored. Too often we have driven around Morgantown and seen small children crawling freely about the car or in their parent's lap. This represents a most serious problem which must be rectified.

"You need not spend very much time around a hospital to see a young child who has suffered serious injury from the negligence and thoughtlessness of his parents. Many of these injuries are not of a trivial nature. A large number of children are killed outright. However, many suffer head or spinal cord injuries from which they will never recover. They must be cared for by others or institutionalized, possibly for the rest of their lives.

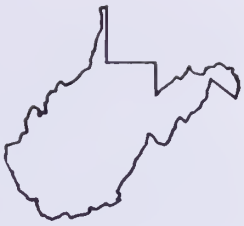
"When questioned, parents frequently use the excuse, 'but I was holding him.' This simply is not valid. The unexpected jolt of even a small collision invariably breaks all but the firmest of grips. This allows the potential for injury from the impact of the child's head or body smashing against the dashboard or windshield. This force has been equated to that of dropping the child from a third-story window.

"Many persons feel that such protection is not needed on a 'short trip to the store or just about town.' It should be pointed out that time and time again studies have proven that most motor vehicle accidents occur within 25 miles of home and at speeds of less than 30 mph. While accidents at this speed may not necessarily injure an adult, they can be devastating to a child. Compliance is necessary every time a child is in the car.

"The child seat law is clear in its demands on parents and, in the consequences for ignoring it, a fine may be levied. However, it is fair. A judge may suspend the fine if the offender shows proof of purchase of a child seat and promises to use it. In this way, the law is not as punitive as it is protective."

John Beatty, M. D.
Critical Care Medicine Fellow,
West Virginia University Hospital

GENERAL NEWS

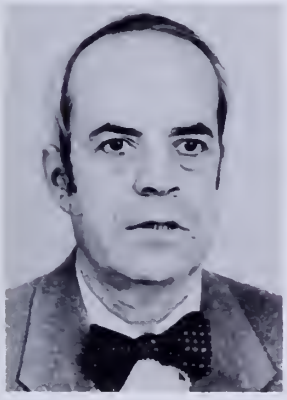


Surgical Specialties Slated For Convention Talks

Plastic surgery, arthroscopic surgery, and diagnosis in neurosurgery are three of the subjects to be discussed during the Saturday morning, August 28, general session of the 115th Annual Meeting of the State Medical Association.

The convention will be held August 26-28 at the Greenbrier in White Sulphur Springs.

The three speakers and topics for the second, and final, general session on Saturday morning currently being announced by the Program Committee are:



D. Verne McConnell, M. D.

"Contemporary Plastic Surgery" — D. Verne McConnell, M. D., of Wheeling, plastic and reconstructive surgeon, and Clinical Professor of Surgery, West Virginia University Medical Center; "Recent Advancement in Arthroscopic Surgery" — James R. Andrews M. D., Hughston Orthopaedic Clinic, Columbus, Georgia, and Associate Clinical Professor, Department of Orthopedics, Division of Sports Medicine, Tulane University School of Medicine, New Orleans; and "The Diagnostic Revolution in Neurosurgery"—Ralph O. Dunker, Jr., M. D., WVU Associate Professor of Neurosurgery.

The scientific program of the Annual Meeting is completed with the announcement of the above papers.

Doctor McConnell also will speak at a meeting of the West Virginia State Society of Anesthesiologists (at noon on Saturday) being held in conjunction with the Association's convention. His topic will be "Metabolic Changes in Plastic Surgery Patients."

Doctor Andrews also will talk on "Advancement in Ligament Reconstruction of the Knee" at a meeting of the Association's Section on Orthopedic Surgery at 2 P. M. on Friday.

As announced previously, one of the four speakers for the Saturday morning general session will be Henry A. Wise II, M. D., whose topic will be "Recent Advances in Urology." He is Director and Associate Professor, Division of Urology, Ohio State University, Columbus. "Urological Anatomy and Its Application to Surgery" will be the title of another paper by Doctor Wise to be presented at a breakfast meeting of the Section on Urology at 8 A. M. on Saturday.

The Annual Meeting will open with a preconvention session of the Association's Council and the first session of the House of Delegates on Thursday morning and afternoon; and end with the second and final House session and reception for new Association officers on Saturday afternoon and evening.

The first general session, preceded by opening convention exercises, will be held Friday morning.

AMA President to speak

As announced previously, Dr. William Y. Rial of Swarthmore, Pennsylvania, who was installed as President of the American Medical Association in Chicago in June, will address the first House session Thursday afternoon; and Dr. Edward N. Brandt, Jr., Assistant Secretary for Health in the U. S. Department of Health and Human Services in Washington, will deliver the

James R. Andrews, M. D.

Ralph O. Dunker, Jr., M. D.

keynote Thomas L. Harris Address during the opening exercises Friday morning.

Doctor McConnell practiced in Los Angeles from 1966 to 1973, when he went to Wheeling. He was Associate Professor of Plastic and Reconstructive Surgery at WVU from 1973 to 1976, and has been a Clinical Professor in that specialty at WVU since.

Born in Cleveland, Doctor McConnell was graduated from Princeton University and received his M. D. degree in 1959 from Columbia University. He interned at Johns Hopkins Hospital and completed residencies at Vanderbilt University and the University of California at Los Angeles.

Doctor Andrews began his practice of orthopedic surgery and sports medicine in Columbus in January, 1973. He is team physician for the Columbus-Phenix City area junior high and high schools, and for the University of North Alabama and Livingston, Troy State and Auburn universitites, also in Alabama.

Native of Louisiana

He currently is Treasurer of the American Orthopaedic Society for Sports Medicine, and is an Associate Member of the National Athletic Trainers Association.

A native of Louisiana, Doctor Andrews received his undergraduate and M. D. (1967) degrees from Louisiana State University. He took his residency at Tulane University, followed by a fellowship in hand surgery and athletic medicine under Drs. Frank C. McCue III and Warren Stamp in Charlottesville, Virginia, in 1972. He also was a fellow in knee surgery and athletic injuries under Professor Albert Trillat at the University de Lyon in France during 1972.

Doctor Dunker came to WVU in 1976 from the University of Washington, Seattle, where he interned, took his residency, and served as Instructor of Neurosurgery.

Born in Washington, D. C., he was graduated from Cornell University and earned his M. D. degree in 1970 from Ohio State University. He received honors in surgery and neurosurgery at Ohio State in 1970, and the Resident's Paper Award in 1975 from the North Pacific Society of Neurology and Psychiatry.

Doctor Dunker is the author or co-author of some 10 scientific articles, and has presented papers for a number of medical groups, including the Congress of Neurological Surgeons at Houston, in 1980, and the Neurosurgical Society of the Virginias in 1981.

Dr. Harry Shannon of Parkersburg, during the second House Session on Saturday, will be inaugurated as Association President to succeed Dr. John B. Markey of Charleston.

Some 14 affiliated societies and sections of the Association, including those mentioned above, will have business and scientific sessions on Friday and Saturday, primarily in the form of breakfast and luncheon meetings.

A "Symposium on Common Disorders of the Eye, Ear and Mouth" will comprise the first general session, immediately following the opening exercises Friday morning. The speakers and topics, as announced previously, will be:

"Medical Therapy of Glaucoma"—Larry Schwab, M. D., Assistant Professor, Department of Ophthalmology, WVU; "Dizziness: Current Thoughts on Diagnosis and Management"—Malcolm D. Graham, M. D., Professor and Vice Chairman, Department of Otorhinolaryngology, University of Michigan;

"The Elusive Oral Pre-Cancer"—J. E. Bouquot, D.D.S., M.S.D., Chairman, Department of Oral Pathology, WVU School of Dentistry; and "Abnormalities in Visual Acuity and their Treatment"—Theodore P. Werblin, M. D., Ph.D., Director, Corneal Research, The Blaydes Foundation, Bluefield, and Clinical Assistant Professor of Ophthalmology at WVU, the University of North Carolina and Louisiana State University.

Program Committee

Doctor Graham also will speak on "Otitis Media—An Update" at a meeting of the West Virginia Chapter, American Academy of Pediatrics at 2 P. M. on Friday.

Serving on the Program Committee are Drs. Carl J. Roncaglione, South Charleston, Chairman; Jean P. Cavender, Charleston; Thomas P. Long, Man; David Z. Morgan, Morgantown; Kenneth Scher, Huntington, and Doctor Shannon.

The Annual Meeting of the Auxiliary to the State Medical Association, with Mrs. Logan W. Hovis of Vienna in charge as the Auxiliary's President, again will run concurrently with the Association's convention.

The official convention program, including the schedule and speakers for other related meetings, physicians who will serve as moderators, and additional details, will appear in the August issue of the *Journal*.

88 Members In New WVU Class Announced

Eighty-five West Virginians and three residents of two other states will compose the 1982 entering class of the West Virginia University School of Medicine.

The 68 men and 20 women received their undergraduate education at 30 different colleges or universities. More than half, or 45, attended WVU. Marshall University accounted for four and West Virginia State, Fairmont State, West Virginia Wesleyan and Alderson-Broaddus Colleges each had three graduates admitted. Two attended West Virginia Tech, and Bethany, Concord, Salem, Shepherd and West Liberty colleges each accounted for one.

The remaining 20 attended 18 different out-of-state colleges or universities.

Nine class members have advanced degrees, with four having received the Ph.D.

The West Virginians come from 24 counties. Twenty-three class members list home addresses in Monongalia County. This reflects the change of address made by many students during their undergraduate days at WVU.

Eleven members of the class are from Kanawha County. Eight are from Ohio County while Cabell and Marion each has five.

Cumulative grade-point average for the accepted applicants is 3.6: their science average is 3.57.

Applications were sent to 356 West Virginians and 264 non-residents. Interviews were granted by the 20-member committee on admissions to 238 from the state and to 60 from out-of-state.

Names listed represent those accepted into the class as of May 25, 1982. It does not include the names of alternates who may be admitted if withdrawals occur.

Member of the class include:

Barbour: Philippi — Jennifer G. Miller and Mark R. Withers.

Berkeley: Martinsburg — Debra L. Henry.

Braxton: Frametown — Daniel S. Frame; Sutton — Teresa L. Skidmore.

Brooke: Weirton — Bruce L. Ginier; Wellsburg—William M. Almasy.

Cabell: Huntington — Donald F. Bias, Jr., Lois L. Minich, Alan Napier, Timothy W. Nelson and Stephen W. Pollard.

Fayette: Charlton Heights — Danny C. Blankenship; Glen Ferris — Leon S. Kwei.

Greenbrier: Lewisburg — Reza A. Alidina.

Hancock: Weirton — Lisa A. Brancazio, Albert T. Bundy and Janet L. Griffin.

Hardy: Wardensville — Robert A. Vance.

Harrison: Clarksburg — John D. Angotti, Elizabeth A. Clubb, William R. Marchand, and Walter P. Thrush; Salem — Thomas G. Mason II.

Kanawha: Charleston — Jonathan D. Boggs, Philip F. Gaziano, Michael W. Halley, Edward F. McKenna, Steven G. McLaughlin, Rodney M. Simpkins and Paul A. Skaff; Cross Lanes — Leroy J. Korb, Jr.; Dunbar — Debra J. Panucci; Nitro — John P. Lilly; South Charleston — John E. Scharf.

Marion: Fairmont — Michael R. Brumage, James E. Hancock and Mark A. Jarrett; Mannington — William M. Parrish; Monongah — Michael B. Edmond.

Marshall: Glen Dale — Carol L. Simmons.

Mercer: Princeton — James K. Martin.

Mingo: Williamson — David T. Ward.

Monongalia: Morgantown — Gary S. Abel, Phillip S. Allender, Patricia A. Berger, Jack M. Boyles, Walter C. Brogan III, Stewart J. Callis, Dennis C. Channel, Jr., Richard N. DeCarlo, Kay E. Dunnavant, Barbara L. Gould, Laurie Gutmann, David B. Holton, John W. LaCount, Edward J. McClain, Douglas F. Milam, Cheryl A. Palmer, Jerilyn K. Ribovich, John C. Schulz, Michael J. Sevka, Richard M. Vagliente, Victorine M. Vining, Louis J. Wickas III, and Paul Yeaton.

Ohio: Wheeling — William H. Benson, Vincent M. Gioia, Terry L. Gramlich, Stephen J. Ledergerber, Michele S. Maroon, John S. Shymansky, David L. Thomas, and Matthew J. Ward.

Preston: Hopemont — Dianne G. Muchant.

Putnam: Hurricane — Mark C. Bates; Nitro — Jeffrey G. Priddy.

Raleigh: Beckley — Donna J. Slayton and John A. Willis.

Randolph: Elkins — David L. Shallcross.

Upshur: Buckhannon — Robert R. Heavner.

Wayne: Fort Gay — Marc A. Workman.

Wood: Vienna — Robert R. Johnson II and Steven J. Milhoan; Washington — Edwin B. Boso.

Out-of-State: Pennsylvania, Bethel Park — Timothy M. Campbell; Connellsville — James E. Mulac; Virginia, Richmond — Tina L. Presson.

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1982, as compiled by Dr. Robert L. Smith, Assistant Dean for Continuing Education, and J. Zeb. Wright, Ph. D., Coordinator, Continuing Education, Department of Community Medicine, Charleston Division. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of The Journal.)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Morgantown, Charleston and Wheeling campuses. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, 3110 MacCorkle Avenue, S. E., Charleston 25304; Office of Continuing Medical Education. WVU Medical Center, Morgantown 26506; or, Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

Regularly Scheduled Continuing Education Outreach Programs from WVU Medical Center/ Charleston Division

Buckhannon, St. Joseph's Hospital, 3rd floor, 3rd Thursday, 7-9 P. M.—July-August (summer vacation).

Sept. 16, "Anxiety: The Therapeutic Dilemma," Donald Robinson, M. D.

Cabin Creek, Cabin Creek Medical Center, Dawes, 2nd Wednesday, 8-10 A. M.—July 14, "Summer-Related Illnesses," Marshall Carper, M. D.

Aug. 11, "Dysfunctional Uterine Bleeding," Robert D. Patchell, M. D.

Gassaway, Braxton Co. Memorial Hospital, 1st Wednesday, 7-9 P. M.—July 7, "Update Cardiology, Including Calcium Blockers," Stafford Warren, M. D.

Aug. 4, "Peridontal Disease: Recognition and Management," Wayne Given, D. D. S.

Madison, Allied Health Room, Boone Career Center. West Madison, 2nd Tuesday, 7-9 P. M. — July (summer vacation).

Aug. 10, "Evaluation & Treatment of Thyroid Nodules," Richard Kleinmann, M. D.

Oak Hill, Oak Hill High School (Oyler Exit, N 19) 4th Tuesday, 7-9 P. M.—July-August (summer vacation).

Welch, Stevens Clinic Hospital, 3rd Wednesday, 11 A. M.-1 P. M.—July 21, "Anxiety: The Therapeutic Dilemma," "Richard Koon, M. D.

Aug. 18, "Behavioral Problems in Children & Adolescents," Henrietta L. Marquis, M. D.

Whitesville, Raleigh-Boone Medical Center, 4th Wednesday, 11 A. M.-1 P. M.—July-August (summer vacation).

Williamson, Appalachian Power Auditorium, 1st Thursday, 6:30-8:30 P. M.—July-August (summer vacation).

Officers and board members of the West Virginia Gastrointestinal Society were named at a recent joint meeting of the organization with the West Virginia Chapter of the American College of Surgeons at the Greenbrier. From left, are Drs. Ronald D. Gaskins, Chairman of Continuing Medical Education, Donald E. McDowell, Secretary-Treasurer, and Dennis P. Sweeney, Past Secretary-Treasurer, all from the West Virginia University Medical Center; Duane D. Webb, Huntington, President-Eleet; Catalino B. Mendoza, Jr., Clarksburg, President, and Richard F. Carter, White Sulphur Springs, board of directors. Other directors are Drs. William O. McMillan, Jr., and Eric P. Mantz, both of Charleston.

Heart Group President

Dr. Creel S. Cornwell of Clarksburg recently was elected to serve a second term as President of the American Heart Association, West Virginia Affiliate.

Dr. William A. Neal of Morgantown was elected Vice President.

Regional Health Department Includes Six Counties

The Mid-Ohio Valley Health Department (MOVHD) began services to a six-county region on July 1. On that day, the public health departments of Calhoun, Pleasants, Ritchie, Roane, Wirt and Wood counties and the City of Parkersburg were absorbed by the Mid-Ohio Valley Board of Health (MOVBH). This multi-county, regional public health agency is the culmination of a 16-month effort by a citizens committee, chaired by Judith Shannon of Parkersburg, wife of Harry L. Shannon, M. D., President Elect of the West Virginia State Medical Association.

The 14-member MOVBH is made up of two delegates from each of the six counties and the City of Parkersburg. The Chairperson is James R. Sleeth of Pullman, in Ritchie County. The Vice-Chairperson is Judith Shannon, representing Wood County; and the Treasurer, James Mylott, Roane County.

The former West Virginia Health Systems Agency supported the citizens committee with printing, staff services and funds for meeting costs and staff travel. The Agency also funded the position of the new Executive Director, Ward Duel, effective last April 15.

Prior to the reorganization, 23 physicians provided services, from several hours a week to a couple of hours a month, at clinics operated by the six counties. All have been contacted and all plan to continue their services—a tribute to the public spirit of physicians in the Mid-Ohio Valley, Duel commented.

Seeking Medical Director

The MOVBH is recruiting actively for either a full-time or part-time Medical Director. A license to practice medicine in West Virginia is required.

While emphasis on clinics will continue, it is of interest to note that the largest programs are home nursing care of the ill, and assistance by trained aides to the incapacitated in their homes. Illness-prevention through broad-based public health nursing and nutrition programs constitutes the bulk of the remaining medically-oriented programs.

Duel hopes to achieve a smooth transition from six local facilities to a regional operation. He comes from Illinois, where he headed the organization of the Skokie and McHenry County health departments. From 1971 through 1981, he was Assistant Director of the Department of Environmental Public and Occupational Health of the American Medical Association.

A book describing the proposed operation and the duties of key staff is available. Call Executive Director Duel at 304-485-7374 or write MOVHD at 211 Sixth Street, Parkersburg 26101.

Review A Book

The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal*, Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication.

Physician's Handbook, 20th Edition, by Marcus A. Krupp, M. D.; Lawrence M. Tierney, Jr., M. D.; Ernest Jawetz, M. D., Ph.D.; Robert L. Roe, M. D.; and Carlos A. Camargo, M. D. 774 pages. Price $12. Lange Medical Publications, Los Altos, California 94022. 1982.

Current Pediatric Diagnosis & Treatment, 7th Edition, by C. Henry Kempe, M. D.; Henry K. Silver, M. D., and Donough O'Brien, M. D. 1,106 pages. Price $26. Lange Medical Publications, Los Altos, California 94022. 1982.

The Self Seekers, by Richard Restak, M. D. 395 pages. Price $17.95. Doubleday & Company, Inc., 245 Park Avenue, New York, New York 10017. 1982.

Four MU Graduates Receive Achievement Awards

Four May graduates of the Marshall University School of Medicine received recognition for outstanding achievements, according to Dr. Patrick I. Brown, Assistant Dean for Medical Student Affairs.

Dr. Gretchen E. Oley of Huntington received the Upjohn Achievement Award as outstanding graduating senior medical student as determined by the faculty. Doctor Oley began her graduate training July 1 in an internal medicine residency at the MU School of Medicine.

Dr. Robert W. Keefover of Fairmont received the CIBA-Geigy Award as the exemplary physician in his class as determined by his fellow students. Doctor Keefover entered the psychiatry

residency program at Strong Memorial Hospital, Rochester, New York, on July 1.

Dr. Michael E. Kilkenny of Ballard (Monroe County) was chosen by the faculty as the recipient of the W. Edward Black Award for outstanding achievements in rural primary care medicine. The award is named for the prominent Lincoln County businessman, who died earlier this year. Doctor Kilkenny began a family practice residency at Marshall on July 1.

Dr. Clayton L. Walker of Huntington was the recipient of the Infectious Diseases Award for excellence in work in the infectious diseases section of the school's Department of Medicine. Doctor Walker began a surgical residency July 1 at the William Shands Hospital-University of Florida at Gainesville.

Dr. Charles L. Yarbrough, a Huntington dermatologist, was voted by the students as "Best Volunteer Faculty Instructor." He holds dual clinical appointments in pediatrics and medicine at Marshall.

Acute Shortage In State Of Anesthesiologists

The number of board-certified anesthesiologists in West Virginia has more than doubled in the past eight years, but the state still has an acute shortage of such physicians.

Richard B. Knapp, M. D., Chairperson of Anesthesiology in the West Virginia University School of Medicine, said that in 1974 the state had only 37 physicians trained to administer anesthesia during surgery and other procedures. That has grown to 87 at present but is still far below the national average of 125 per one million population.

The WVU program, which Doctor Knapp described as outstanding (based on the annual scores on national intraining examinations given by the American Board of Anesthesiology), has provided most of the new anesthesiologists.

"Our residents rank in just about the 50th percentile nationally when they start the three-year program, but in tests after one year they have on the average moved up to the top 25th percentile. And they stay there during the remainder of the program," Doctor Knapp said.

He observed that there has been "a shortage of anesthesiologists everywhere, and nowhere worse than in West Virginia." But with the development of the WVU program a growing number of medical graduates are entering this specialty.

Medical Meetings

Aug. 26-28—115th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Aug. 30-Sept. 2—Am. Hospital Assn., Atlanta.

Sept. 9-11—Peripheral Vascular Disease Symposium (Saint Anthony Hospital), Columbus, OH.

Sept. 20-23—Am. College of Radiol., Boston.

Sept. 23 — Infectious Disease Day (Wheeling Area CME Program—Ohio Valley Medical Center, Wheeling Hospital), Wheeling.

Sept. 25-Oct. 1—Am. College of Emergency Physicians, San Francisco.

Sept. 29-Oct. 2—Am. Neurological Assn., Washington, D. C.

Sept. 30 - Oct. 2 — Women's Health Conference (WVU), Morgantown.

Sept. 30-Oct. 3—ASIM, Chicago.

Oct. 4-7—AAFP, San Francisco.

Oct. 15-17—Med. Society of the District of Columbia, White Sulphur Springs.

Oct. 22-24—PA Med. Society, Philadelphia.

Oct. 23-28—Am. Academy of Pediatrics, New York City.

Oct. 24-29—Am. College of Surgeons, Chicago.

Oct. 24-30—Am. College of Gastroenterology, New York City.

Oct. 30-Nov. 2—Southern Med. Assn., Atlanta.

Nov. 4-6—Am. Cancer Society, New York City.

Nov. 7-10—National Hospice Organization, Washington, D. C.

Nov. 10-14—Med. Society of VA, Williamsburg.

Nov. 15-18—Am. Heart Assn., Dallas.

Nov. 18—Diabetes Update (Wheeling Hospital, Ohio Valley Medical Center), Wheeling.

Dec. 2—Am. College of Chemosurgery, New Orleans.

Dec. 5-8 — Interim Meeting, AMA House, Miami Beach.

1983

Jan. 21-23—16th Mid-Winter Clinical Conference, Charleston.

April 15-17—WV Chapter, AAFP, Morgantown.

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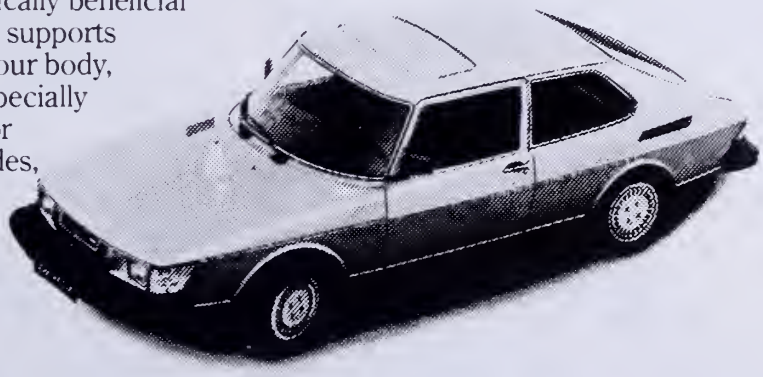

Harvey Shreve

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WVU Medical Center
–News–

Compiled from material furnished by the Medical Center News Service, Morgantown, W. Va.

Awards Convocation Honors Students, Faculty

Valerie Lazzell of Morgantown, a second-year student in the School of Medicine, received the Edward J. Van Liere Award for student research at the School's recent annual awards convocation. Other achievements by student and faculty also were recognized.

Ms. Lazzell received the Edward J. Van Liere medal and $200 for her presentation on the effects of orally-administered influenza vaccine. Second place and an award of $100 went to Charles A. Weber, also of Morgantown, and David Allison of Chester received the third-place award of $50. James W. Freese of Wheeling received a prize of $100 for Category II research.

Burt Fazi of Weirton was recognized by his senior classmates for the Upjohn Award based on applied personal qualities including character and leadership. The award consists of an engraved plaque and a $150-prize, and the recipient's name is engraved on a permanent plaque which hangs in the Associate Dean's office.

Third-year student Jack R. Steel of Barrackville received the Sandoz Pharmaceutical Award, which is made to an outstanding student in psychiatry. The award consists of a plaque and $100.

The MacLachlan Award, traditionally given to an outstanding basic sciences teacher chosen by the sophomore class, was shared by Dr. Sydney S. Schochet, Jr., Professor of Pathology, and Dr. Nyles W. Charon, Associate Professor of Microbiology. Both received an engraved plaque provided by the school's alumni association.

Dr. Anthony DiBartolomeo, Associate Professor of Medicine and Chief of the Section of Rheumatology, was chosen by members of the senior class as Clinician of the Year.

Other honors were:

Edward G. Stuart Memorial Award to the senior who "best exemplifies the qualities of empathy and understanding and strengthens competence with compassion," Barbara Ann Clark of Weirton. The award includes a plaque and desk clock, and the student's name is engraved on a permanent wall plaque in the Dean's office. Miss Clark also received an American Medical Women's Association Scholarship Achievement Citation.

Lindsay Memorial Award for outstanding performance in physiology, Michael G. Nunley of Charleston. He also received the Mosby Book Award to a second-year student.

Anido Award for outstanding academic achievement in laboratory medicine by a second-year student, Salvatore Parascandola of West Babylon, New York.

CIBA Award for outstanding service, William D. Ramsey, a second-year student from Mt. Nebo in Nicholas County.

William Bennett Prize

William Bennett Prize in Anesthesiology, Thomas Adamski, a fourth-year student from Elkins. The award is $100 and a certificate.

Merck Manual Awards for scholastic achievement, fourth-year student David Cheney of Philippi and Norman Ferrari of Weirton.

Lange Book Awards for scholarship: seniors Michael Cunningham of Paden City and William Sigmund of Beckley: juniors Richard J. Jackson of Martinsburg and Gary Renaldo of Fairmont: sophomores Stephen J. Freshwater of Wellsburg and Richard F. Loeser of Huntington, and freshmen Hans G. Dransfeld of Huntington and Charles R. Whiteman of Romney.

Also receiving Mosby Book Awards for scholarship were freshman James J. Pettit of Nitro and junior Daniel W. Wilson of St. Marys.

American Medical Women's Association Scholarship Achievement Citations also went to seniors Eleanor K. Lowry of Morgantown, Terry Schwartz of Charleston and Rosanna Sikora of Weirton.

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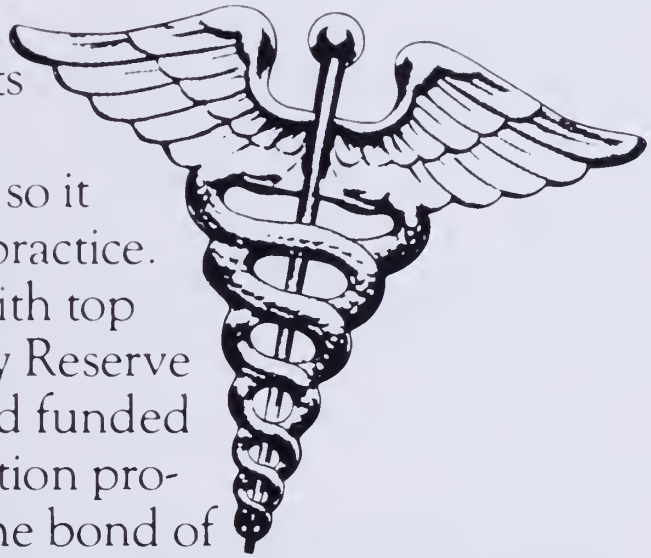

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Third-Party News, Views and Program Concerns

Tighter Standards Proposed In Disability Claims

The Social Security Administration has proposed new medical standards to be used in evaluating disability claims.

The slightly tighter medical standards, published recently in the Federal Register for 60-day comment, are not related to the more rigorous standards announced last year for the disability program as a whole. Significant reductions in the number of beneficiaries are expected under the program.

The revisions on the Listing of Impairments reflect advances in medical treatment and diagnosis and Social Security's experience in evaluating claims. They are not based on any changes in the law.

Of the 13 body systems in the listing, changes are proposed in all but two—skin disorders and genitourinary.

Significant changes are recommended for: respiratory, musculoskeletal, cardiovascular, digestive, hemic and lymphatic, neurological and neoplastic. Less significant are changes for special senses and speech and the multiple body systems listing. Minor changes are proposed for mental disorders and endocrine systems.

Slight changes also are proposed for the Listing of Impairments used in evaluating children under age 18 for Supplemental Security Income disability claims. The changes are for musculoskeletal, special senses and speech, genitourinary, mental and emotional disorders, and neoplastic disease.

More Competitive HMOs Goal Of Administration

The Reagan Administration is considering legislative proposals to make Health Maintenance Organizations (HMOs) more competitive. Frank Seubold, Ph.D., Director of the HMO Office, said a major question to be decided is whether separate legislation should be sought or whether to place the HMO law amendments with the overall pro-competition bill.

The U.S. Department of Health and Human Services is working on a number of changes, Doctor Seubold said, but he stressed that none of them yet has reached the stage of final adoption as departmental policy by HHS Secretary Richard Schweiker.

Among the types of changes under scrutiny at HHS are proposals to give HMOs a free hand in charging members for services on top of the pre-paid fee. At present, HMOs are limited to a nominal extra charge. In addition, staff people are considering dropping or easing the requirements for mental health and substance abuse services by HMOs.

Another change designed to make HMOs more competitive with indemnity insurance would be to allow the organizations to vary their membership charges among their members, taking into account age, health status, etc.

Although the Administration wants to chop the HMO loan program to a bare minimum, officials say they still wish to encourage private development of the plans.

Proposed Immunization Cuts Denounced By Academy

Administration-proposed economies in the childhood immunization program could prove "costly and cruel," an official of the American Academy of Pediatrics has warned the U. S. Senate.

Vincent Fulginiti, M. D., Chairman of the Academy's Committee on Infectious Diseases, also criticized "sensationalized medical accounts of vaccine side effects" that show evidence of frightening parents about pertussis vaccination.

Doctor Fulginiti told a Senate Labor and Human Resources Subcommittee that the delivery of vaccines to children "would be reduced to intolerably low levels" if there is no increase in the $28.8 million sought by the Administration for the immunization program next fiscal year. The seven-per cent cut imposed on the program this year comes at a time when the cost of vaccine has increased 44 per cent over the past two years, he said.

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Obituaries

RICHARD E. DAVENPORT, M. D.

Dr. Richard E. Davenport of Princeton died near there on May 9 in the crash of a helicopter he was piloting. He was 63.

Doctor Davenport commuted daily in the helicopter to the Stevens Clinic Hospital in Welch, where he was an emergency room physician during the night shift. He was returning home to Princeton in the morning when the crash occurred.

Doctor Davenport had lived in Princeton for five years, coming there from Reading, Pennsylvania.

He was born in Peking, China, and at one time built and operated a missionary hospital in Nigeria, West Africa.

Doctor Davenport received his M. D. degree in 1946 from the Loma Linda (California) University School of Medicine, and studied tropical medicine at London (England) University.

He was a member of the West Virginia State Medical Association and the American College of Emergency Room Physicians.

Survivors include the widow; four sons, Robert R. Davenport of Princeton, William L. and James E. Davenport of Seattle, Washington, and Gary E. Davenport of Tunkhannock, Pennsylvania; two brothers, Dr. Donald J. Davenport of Del Mar, California, and Russell Davenport of Colorado; and two sisters, Mrs. Marion Seeley of Beckley and Dr. Marjorie Sczekan of Pueblo, Colorado.

* * *

WILLIAM F. HILLIER, JR., M. D.

Dr. William F. Hillier, Bluefield neurosurgeon, died on May 25 in a Durham, North Carolina, hospital. He was 65.

Born in Boston, Massachusetts, he was graduated from Boston College and received his M. D. degree in 1943 from Yale University. He interned at Duke University Hospital and took his residency at New Haven (Connecticut) Hospital.

Doctor Hillier was a Diplomate of the American Board of Neurological Surgery, a charter member of the Southern Neurosurgical Society, and a member of the American Association of Neurological Surgeons, American Association of Railway Surgeons, the Mercer County Medical Society, and the West Virginia State Medical Association.

Located in Asheville, North Carolina, prior to beginning practice in Bluefield in 1957, he served three years with the U. S. Army Medical Corps during World War II.

Survivors include the widow; a daughter, Mrs. Charles W. Davis of Bluefield, and the mother, Mrs. Katherine Hillier, also of Bluefield.

* * *

JEROME C. ARNETT, M. D.

Dr. Jerome C. Arnett of Rowlesburg, a retired general practitioner, died on June 4 in a Pittsburgh hospital. He was 69.

Doctor Arnett began practice in Rowlesburg in 1942, retiring in 1978.

Born in Parsons, he was graduated from West Virginia Wesleyan College and received his M. D. degree in 1941 from the University of Maryland. He interned at Lutheran Hospital in Cleveland, Ohio.

Doctor Arnett was an honorary member of the Preston County Medical Society, the West Virginia State Medical Association and the American Medical Association, and a member of the West Virginia Chapter, American Academy of Family Physicians.

Survivors include the widow; three sons, Dr. Jerome C. Arnett, Jr., of Elkins, Dr. Edward Arnette of Martinsburg, and Dr. Carroll Arnett of Long Island, New York; and one daughter, Mrs. Colette Listh of Newark, Ohio.

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County Societies

HARRISON

The Harrison County Medical Society met on May 3.

Delegates and Alternates to the Annual Meeting of the State Medical Association in August were selected; annual committee reports were given; and new Society officers were elected. —James E. Bland, M. D., Acting Secretary.

* * *

EASTERN PANHANDLE

The Eastern Panhandle Medical Society met on May 12 in Martinsburg at the Holiday Inn.

The guest speaker was Dr. Gary Simon, whose topic was "Treatment of Mixed Anaerobic and Aerobic Infections." Doctor Simon is Assistant Professor, Division of Infectious Diseases, Department of Medicine, George Washington University Hospital, Washington, D.C.

Delegates and Alternates to the Annual Meeting of the State Medical Association in August were elected.

The March meeting of the Society also is being reported. The scientific lecture for that meeting was "Calcium Channel Blockers and Recent Concepts in Angina," presented by Dr. David Pearle, cardiologist from Georgetown Universiy Hospital in Washington, D.C.—Francisco D. Sabado, Jr., M. D., Secretary.

* * *

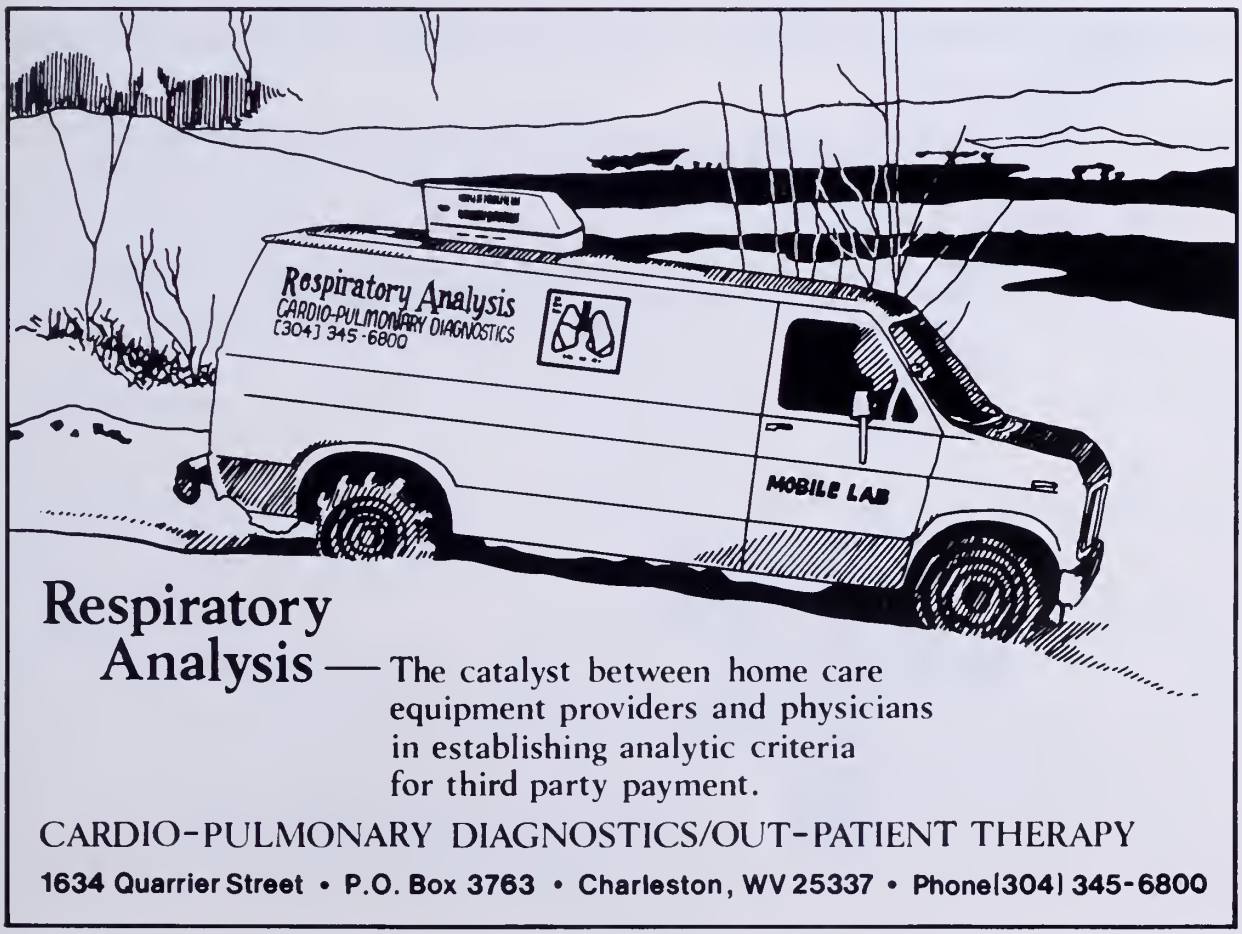
CABELL

The Cabell County Medical Society met on May 13.

The guest speaker was Dr. Douglas Cocks, Manager of Corporate Affairs, Eli Lilly and Company. Doctor Cocks gave an informative talk on the "Economics of the Pharmaceutical Industry."

Guests included local pharmacists and senior medical students from Marshall University School of Medicine.—Maurice A. Mufson, M.D., Secretary.

(continued on page xxiv)



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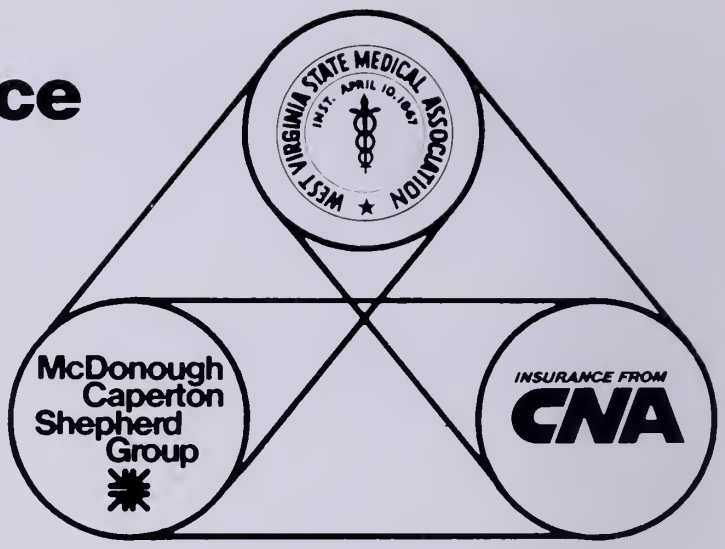

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Book Review

CURRENT MEDICAL DIAGNOSIS AND TREATMENT 1982—Marcus A. Krupp, M. D., and Milton J. Chatton, M. D. 1,113 pages. Price $23. Lange Medical Publications, Drawer L, Los Altos, California 94022. 1982.

This book is intended to serve as a guide to generally accepted therapy for medical illnesses and their diagnosis. The approach to diagnosis and treatment is straightforward and pragmatic. The style is easy to read and avoids unnecessary wordiness. Each topic starts with essentials of diagnosis. Signs and symptoms are presented in list form. A short discussion of the salient features of the illness follows the list of signs and symptoms. Laboratory findings compatible with the disease process, differential diagnosis and prognosis then are presented in a factual manner.

The appendix of the book is a highly useful guide containing immunization schedules, pharmacotherapy in geriatrics, and common laboratory values among other topics. Each system or topic covered in the book is written by a recognized authority in that field. The book is an excellent survey text for students beginning their clinical years. residents, primary care physicians, and for those preparing for licensure examinations.

Those wanting concise explanations of medical illnesses and their diagnosis will be satisfied with this book. The work is not intended as a textbook of internal medicine nor does it fulfill that purpose. It is, however, an excellent guide for diagnosis and treatment in primary medical care. —D. J. Catton, M. D.

COUNTY SOCIETIES—*Continued*

PARKERSBURG ACADEMY

The Parkersburg Academy of Medicine met on April 14 at the Parkersburg Country Club.

Dr. W. L. Wheeler of Columbus, Ohio, spoke on "Hospice."

Dr. Michael J. Lewis of St. Marys, a member of the State Medical Association's Council, reported on the March meeting of the Council in Charleston.—Michael A. Morehead, M. D., Secretary.

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H. L. Jellinek, M. D.
R. B. Garrett, M. D.
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Annual Audit, 1981

The annual audit of receipts and disbursements of the West Virginia State Medical Association for the calendar year 1981 has been completed by the firm of Ernst & Whinney, Certified Public Accountants of Charleston. The completed audit, with accountants' report, follows:

ERNST & WHINNEY
716 Charleston National Plaza

To the Council
West Virginia State Medical Association
Charleston, West Virginia

We have examined the statements of assets, liabilities, and fund balances arising from cash transactions of the several funds of the West Virginia State Medical Association as of December 31, 1981 and 1980, and the related statements of revenues collected and expenses paid of the unrestricted funds and changes in fund balances of the several funds for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

As described in Note A, the Association's policy is to prepare its financial statements on the basis of cash receipts and disbursements; consequently, certain revenues and the related assets are recognized when received rather than when earned, and certain expenses are recognized when paid rather than when the obligation is incurred. Accordingly, the accompanying financial statements are not intended to present financial position and results of operations in conformity with generally accepted accounting principles.

In our opinion, the aforementioned financial statements present fairly the assets, liabilities, and fund balances arising from cash transactions of the several funds of the West Virginia State Medical Association at December 31, 1981 and 1980, and the revenues collected and expenses paid of the unrestricted funds and changes in fund balances of the several funds for the years then ended, on the basis of accounting described in Note A, which basis has been consistently applied.

ERNST & WHINNEY

Charleston, West Virginia
March 8, 1982

STATEMENTS OF ASSETS, LIABILITIES, AND FUND BALANCES ARISING FROM CASH TRANSACTIONS—Note A

WEST VIRGINIA STATE MEDICAL ASSOCIATION

	December 31 1981	1980
UNRESTRICTED FUNDS		
ASSETS		
Cash	$ 18,391	$ 3,146
Certificates of deposit	298,644	129,858
Note receivable—Note B	25,000	
Other assets		36
	$342,035	$133,040
LIABILITIES		
Due to restricted funds	$ 29,969	$ 27,379
State and American Medical Association dues collected in advance	57,221	
	87,190	27,379
FUND BALANCES		
Undesignated	242,449	93,265
Designated for professional liability education	12,396	12,396
	254,845	105,661
	$342,035	$133,040
RESTRICTED FUNDS		
ASSETS		
Cash	$ 36	$ 9,750
Certificates of deposit	76,427	58,492
Due from unrestricted funds	29,969	27,379
Investment in common stock	4,250	4,250
	$110,682	$ 99,871
LIABILITIES		
Assessments collected on behalf of West Virginia State Medical Association Properties, Inc.—Note B	$ 10,036	$ 9,750
FUND BALANCES		
Medical scholarship	96,396	85,871
Endowment	4,250	4,250
	100,646	90,121
	$110,682	$ 99,871

See notes to financial statements.

STATEMENTS OF REVENUES COLLECTED AND EXPENSES PAID—UNRESTRICTED FUNDS—Note A

	Year Ended December 31 1981	1980
Revenues collected:		
Dues	$736,337	$563,849
Advertising	26,965	21,726
Interest	38,270	29,285
Contributions	4,154	4,598
Refund of expenses	4	423
Other revenues, including grants from Endowment Fund: 1981—$704; 1980—$648	18,007	12,538
	823,737	632,419
Expenses paid:		
Dues remitted to AMA	289,588	293,410
Salaries and wages	142,143	134,480
Employee benefits	15,945	15,725
Taxes—payroll and other	8,583	7,339
Office rent	16,305	14,997
Office supplies and expenses	10,231	8,923
Telephone	4,654	4,277
Postage	7,946	9,536
Travel	35,617	45,563
Convention speakers and supplies	21,660	29,026
Publishing and printing	93,025	80,302
Other expenses	28,856	30,635
	674,553	674,213
EXCESS (DEFICIENCY) OF REVENUES COLLECTED OVER (UNDER) EXPENSES PAID	$149,184	$(41,794)

See notes to financial statements.

STATEMENTS OF CHANGES IN FUND BALANCES ARISING FROM CASH TRANSACTIONS—Note A

Year Ended December 31, 1981 and 1980

		RESTRICTED FUNDS		
	Unrestricted Funds	Medical Scholarship Fund	Endowment Fund	Building Assessment Fund
Balance, January 1, 1980	$229,632	$74,715	$4,250	
Excess of expenses paid over revenues collected	(41,794)			
Dues		23,406		
Refund of expenses		750		
Repayment of scholarships		2,900		
Interest collected		6,350		$ 8,235
Scholarships to medical students		(22,250)		
Dividends received			648	
Grant to unrestricted funds			(648)	
Assessment income				41,125
Transfer of land from unrestricted fund	(82,177)			82,177
Transfer and disbursements to West Virginia State Medical Association Properties, Inc.—Note B				(121,787)
Amount transferable to West Virginia State Medical Association Properties, Inc.—Note B				(9,750)
Balance, December 31, 1980	105,661	85,871	4,250	-
Excess of revenues collected over expenses paid	149,184			
Dues		22,590		
Repayment of scholarships		2,500		
Interest collected		7,935		502
Scholarships to medical students		(22,500)		
Dividends received			704	
Grant to unrestricted funds			(704)	
Assessment income				120

Amount transferable to West Virginia State Medical Association Properties, Inc.—Note B				(622)
Balance, December 31, 1981	$254,845	$96,396	$4,250	$ -

See notes to financial statements.

NOTES TO FINANCIAL STATEMENTS
WEST VIRGINIA STATE MEDICAL ASSOCIATION

December 31, 1981

NOTE A — PRESENTATION OF FINANCIAL STATEMENTS

The financial statements are presented using the cash basis of accounting. Therefore, certain revenues and the related assets are recognized when received rather than when earned, and certain expenses are recognized when paid rather than when the obligation is incurred. Office equipment, which is not material, is charged to expense at the time of purchase.

The Association has designated a special assessment to be used for professional liability education. The funds are to be used to inform physicians about current and potential problems with malpractice insurance and are accounted for as unrestricted funds.

Investments received as a gift or bequest are stated at fair market value as of date of grant.

The Association provides scholarships to students attending the Schools of Medicine at West Virginia University and Marshall University, granting M. D. degrees for the purpose of defraying expenses incurred by such students. Under certain conditions, as set forth in the scholarship agreements, the scholarships are repayable to the Association in whole or in part. Scholarships to students and repayments are recorded as decreases and increases, respectively, in the medical scholarship fund.

NOTE B — RELATED PARTIES

West Virginia State Medical Association Properties, Inc., a new corporation, was formed during 1980 to acquire land and construct an office building for the Association. The accounts of the new corporation have not been consolidated in the accompanying financial statements.

During 1980, the Association transferred land to this corporation and collected assessments on its behalf.

During 1981, the Association collected assessments on behalf of the corporation and loaned it $25,000 from the general fund at 15% interest. The Association is committed to loan the corporation an additional $75,000, subject to the money being available. The loan is callable should the Association need those funds for operating purposes.

MEDICAL DIRECTOR OPENING — Medical Director, Full or Part Time, Mid-Ohio Valley Board of Health. Service to Calhoun, Pleasants, Roane, Wirt and Wood Counties. Headquarters in Parkersburg. Public Health Clinics a major responsibility. Must be West Virginia licensed M.D. Both salary and hours of service negotiable. Call Executive Director Ward Duel 304/485-7374 or write Mid-Ohio Valley Board of Health, 211 6th Street, Parkersburg, West Virginia 26101.

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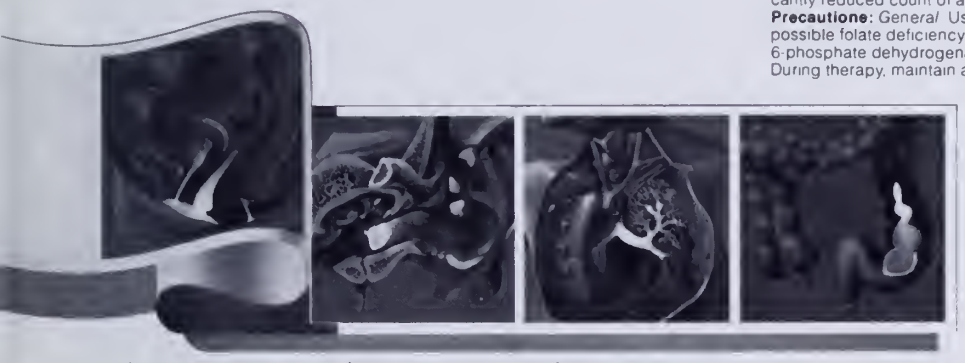

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faster relief of diarrhea than with ampicillin[2]

BACTRIM™ (trimethoprim and sulfamethoxazole/Roche)
Before prescribing, please consult complete product information, a summary of which follows:
Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.
For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.
For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.
For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.
Also for the treatment of documented *Pneumocystis carinii* pneumonitis.
Contraindications: Hypersensitivity to trimethoprim or sulfonamides; patients with documented megaloblastic anemia due to folate deficiency; pregnancy at term, nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age.
Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended, therapy should be discontinued if a significantly reduced count of any formed blood element is noted.
Precautions: *General* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.
Bactrim may prolong prothrombin time in those receiving warfarin, reassess coagulation time when administering Bactrim to these patients.
Pregnancy: Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.
Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias.* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions.* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea, pseudomembranous colitis and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions.* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.
Dosage: Not recommended for infants less than two months of age.
URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN.
Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.
Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.
For patients with renal impairment. Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.
ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS IN ADULTS:
Usual adult dosage. 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 14 days.
PNEUMOCYSTIS CARINII PNEUMONITIS:
Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.
Supplied: *Double Strength (DS) tablets,* each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100, Tel-E-Dose® packages of 100; Prescription Paks of 20 and 28. *Tablets,* each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500, Tel-E-Dose® packages of 100; Prescription Paks of 40. *Pediatric Suspension,* containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); cherry flavored—bottles of 100 ml and 16 oz (1 pint). *Suspension,* containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); fruit-licorice flavored—bottles of 16 oz (1 pint).

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1. Rubin RH, Swartz MN. *N Engl J Med 303* 426-432, Aug 21, 1980. 2. Data on file, Medical Department, Hoffmann-La Roche Inc.

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160 mg trimethoprim and 800 mg sulfamethoxazole

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maximizes results with B.I.D. convenience

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*due to susceptible strains of indicated organisms

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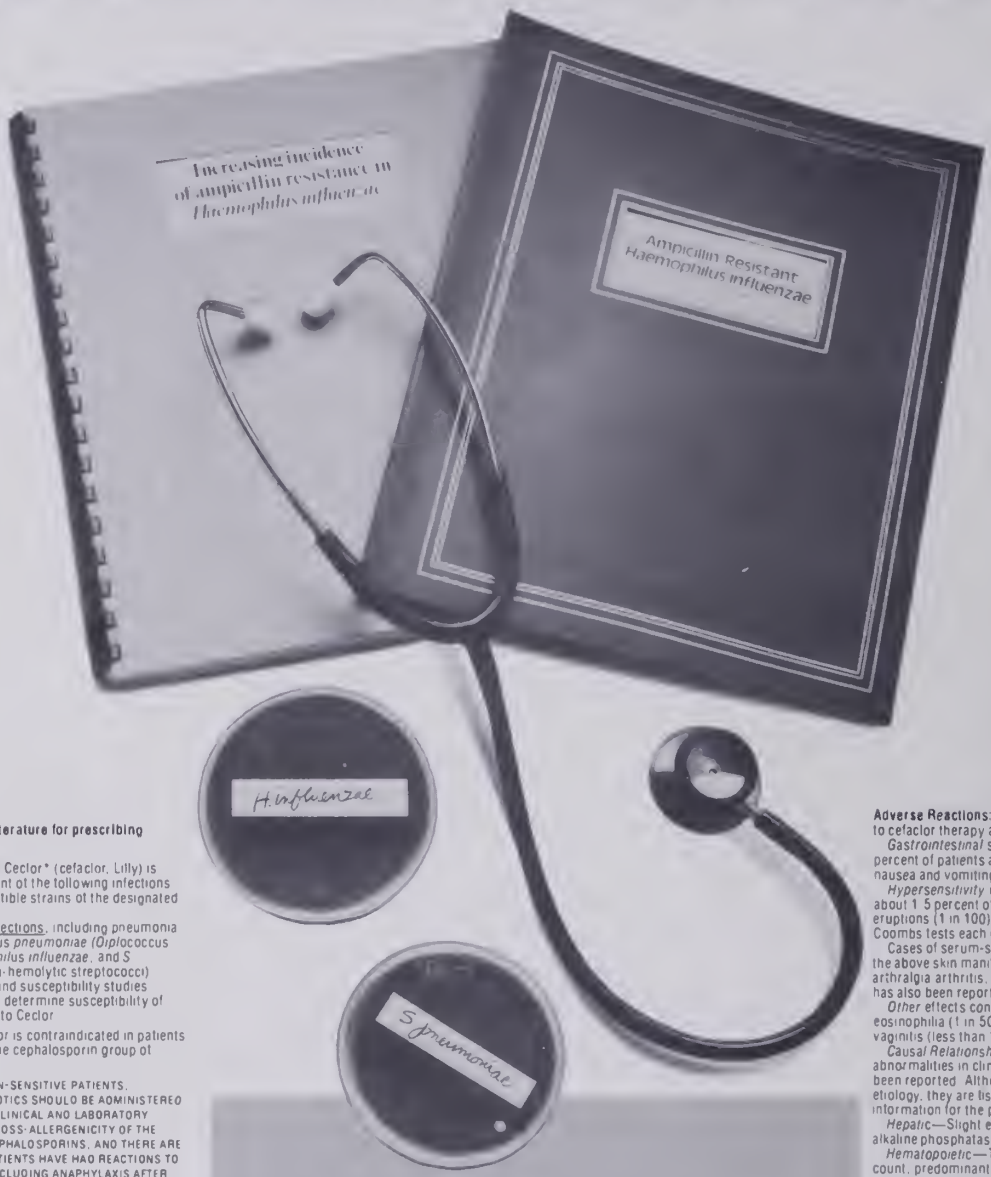
Volume 78 Number 8

August 1982

An added complication... in the treatment of bacterial bronchitis*



Some ampicillin-resistant strains of Haemophilus influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-6]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

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cefaclor

Pulvules®, 250 and 500 mg

Brief Summary.
Consult the package literature for prescribing information.

Indications and Usage. Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS TO BOTH DRUG CLASSES (INCLUDING ANAPHYLAXIS AFTER PARENTERAL USE)

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs

Precautions: If an allergic reaction to cefaclor occurs the drug should be discontinued and, if necessary, the patient should be treated with appropriate agents, e.g. pressor amines, antihistamines, or corticosteroids

Prolonged use of cefaclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs test may be due to the drug

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such a condition, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly)

Usage in Pregnancy—Although no teratogenic or adverse effects were seen in reproduction studies in mice and rats receiving up to 12 times the maximum human dose or in ferrets given three times the maximum human dose, the safety of this drug for use in human pregnancy has not been established. The benefits of the drug in pregnant women should be weighed against a possible risk to the fetus

Usage in Infancy—Safety of this product for use in infants less than one month of age has not been established

Adverse Reactions: Adverse effects considered related to cefaclor therapy are uncommon and are listed below

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70) and nausea and vomiting (1 in 90)

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs tests each occur in less than 1 in 200 patients

Cases of serum-sickness-like reactions, including the above skin manifestations, fever, and arthralgia/arthritis, have been reported. Anaphylaxis has also been reported

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients)

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician

Hepatic—Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40)

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40)

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200) [103080]

*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.

Note Ceclor® (cefaclor) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information

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Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285

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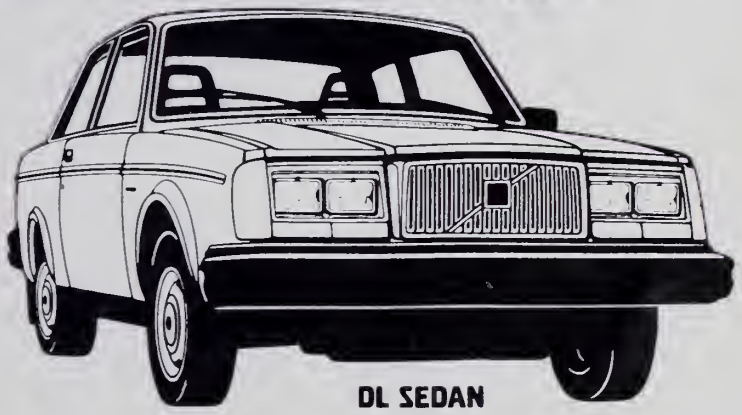

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Usage in Pregnancy Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions

Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions

The most frequently encountered adverse reactions are related to the gastrointestinal system.

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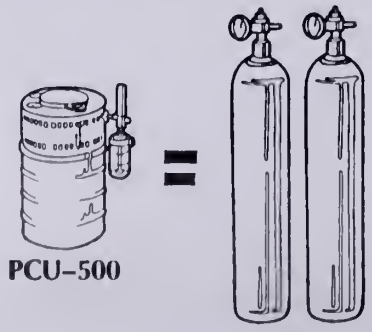

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(range)	(61-75%)	(91-100%)	—	(90-100%)
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(range)	(70-99%)	(99.5%-100%)	—	—

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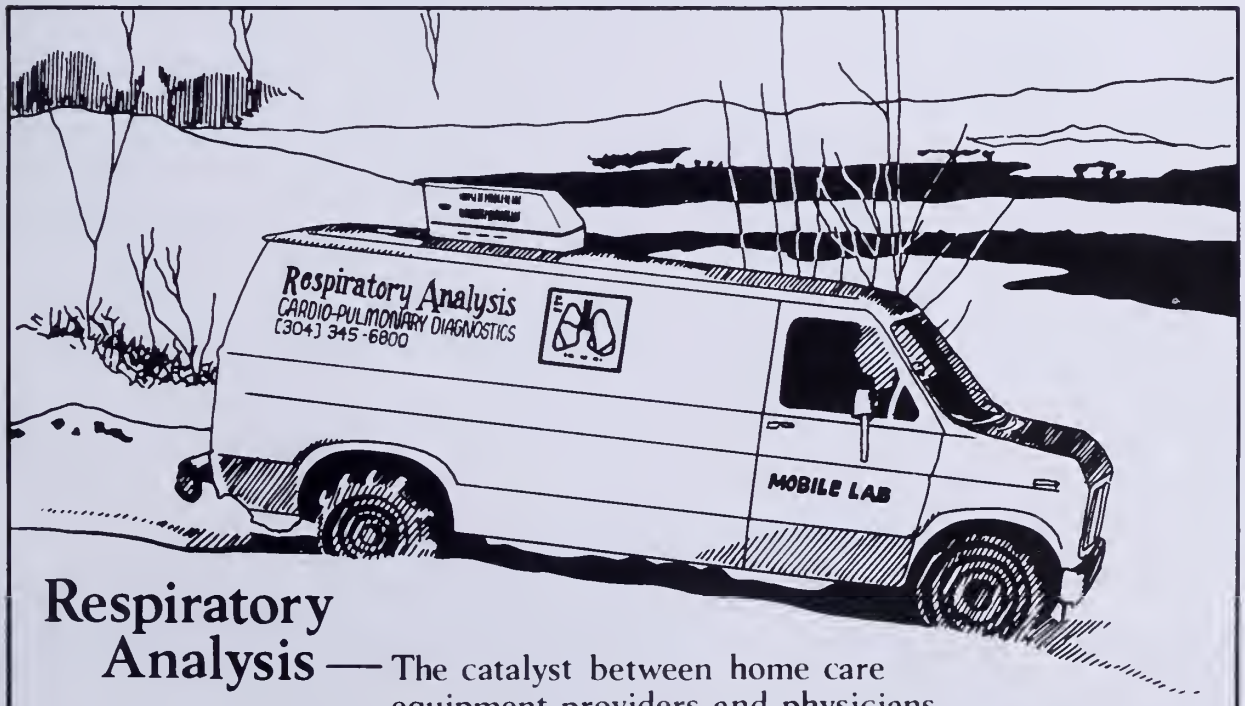

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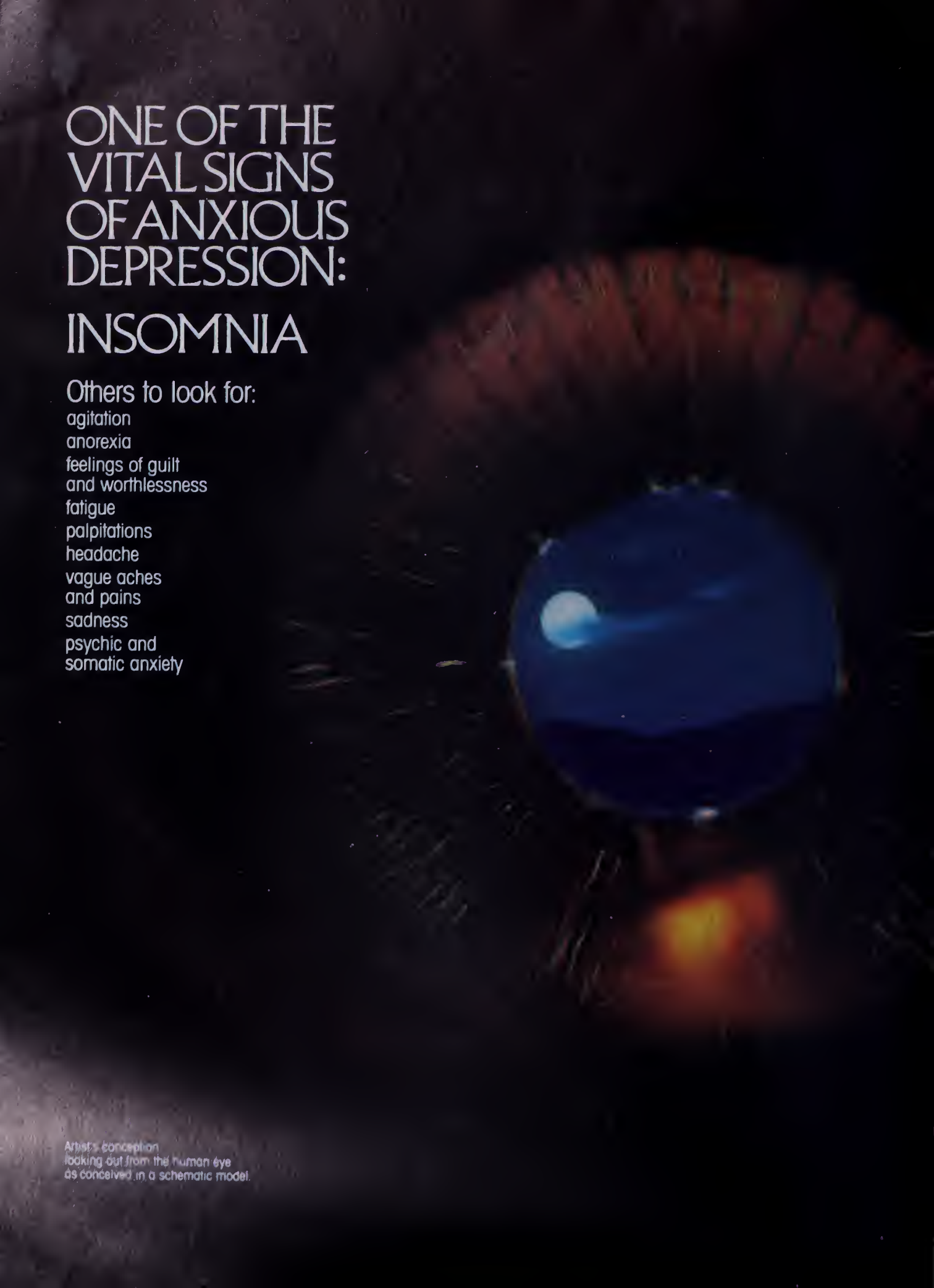

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Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use, then initiate cautiously, gradually increasing dosage until optimal response is achieved Contraindicated during acute recovery phase following myocardial infarction
Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs Closely supervise cardiovascular patients (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses Myocardial infarction and stroke reported with use of this class of drugs) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e g , operating machinery, driving)
***Usage in Pregnancy:* Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**
Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage, withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline, symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide)
Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients Periodic liver function tests and blood counts are recommended during prolonged treatment Amitriptyline component may block action of guanethidine or similar antihypertensives Concomitant use with other psychotropic drugs has not been evaluated sedative effects may be additive Discontinue several days before surgery Limit concomitant administration of ECT to essential treatment See Warnings for precautions about pregnancy Limbitrol should not be taken during the nursing period Not recommended in children under 12 In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects
Adverse Reactions: Most frequently reported are those associated with either component alone drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely
The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs
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Psychiatric Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido
Neurologic Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns
Anticholinergic Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract
Allergic Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus
Hematologic Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia
Gastrointestinal Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue
Endocrine Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female and elevation and lowering of blood sugar levels
Other Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling
Overdosage: Immediately hospitalize patient suspected of having taken an overdose Treatment is symptomatic and supportive IV administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning See complete product information for manifestation and treatment
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Panhypopituitarism Because Of Metastatic Carcinoma

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Although pituitary metastases are usually asymptomatic, occasionally posterior pituitary insufficiency occurs, and rarely there is both anterior and posterior pituitary insufficiency. The incidence of hypopituitarism is likely to be more common, but is seldom diagnosed because of the terminal state of most patients with widely disseminated carcinoma. Its recognition and treatment may greatly improve the patient's well-being and perhaps survival.

Metastatic carcinoma to the pituitary gland is rarely recognized antemortem. Pituitary metastases are usually asymptomatic, but infrequently posterior pituitary insufficiency is present and, on rare occasions, there are both anterior and posterior pituitary insufficiency. The incidence of hypopituitarism is likely to be more common, but is seldom recognized because of the terminal state of most patients with widely disseminated carcinoma. We describe a woman with hypopituitarism secondary to metastatic adenocarcinoma who responded remarkably well to hormonal replacement and clofibrate therapy.

Case Report

A 59-year-old woman was well until December, 1977, when she began having polydipsia and polyuria lasting six to eight weeks and then remitting. Symptoms occurred intermittently thereafter. Although she developed a right frontal headache in 1977, she failed to seek medical attention until April, 1978, when a work-up, including brain scan at her local hospital, was negative. She was referred to the West Virginia University Medical Center where a diagnosis of Trigeminal Neuralgia was made and treated successfully with carbamazepine.

In January, 1979, she developed diplopia followed by sudden loss of vision in the right eye. She was seen at another hospital where, by tomography, CT scan, and carotid angiography, a mass lesion which had eroded the anterior margin of the sella turcica and extended into the sphenoid sinus was noted. A transnasal biopsy showed mucinous adenocarcinoma (Figure 1).

She was referred to the West Virginia University Medical Center for radiation therapy. Examination here showed a chronically-ill-appearing, female Caucasian with ptosis of the right eye. The blood pressure was 88/66 mm.

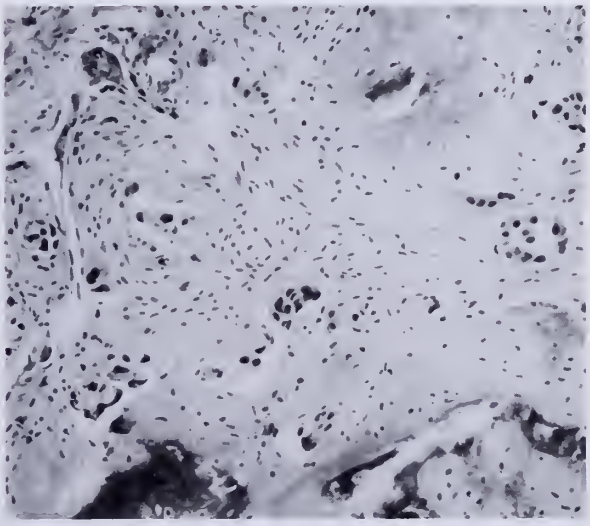

Figure 1. Microphotograph of the biopsy specimen showing nests of poorly-differentiated cells eroding bone (hematoxylin-eosin, original magnification x 100).

Hg. with pulse 92 beats/minute, supine, and 70/50 mm. Hg. pulse 120, sitting. The right eye had no extraocular muscle function, with a fixed and dilated pupil and marked optic atrophy. There were cranial nerve palsies of II-VII on the right. Breast and lymphatic examinations were negative. There was sparse axillary and pubic hair.

Sinus films showed a mass lesion in the right maxillary and frontal sinuses (Figure 2), and skull films showed the sella to be completely eroded (Figure 3). Baseline morning cortisol was 5.5 ug/dl (normal 6-25 ug/dl) but cortrosyn stimulation was normal with an increase to 31.9 ug/dl. Serum thyroxine was 6.3 ug/dl (nl 4.5-11.5) with T_3 resin uptake of 24.6 per cent (nl 25-35 per cent). TRH stimulation showed no change in TSH from a baseline value of 2.1 mIU/ml. FSH and LH values were 1.0 mIU/ml and 1.5 mIU/ml respectively (normal 40-150 mIU/ml). L-Dopa stimulation of human growth hormone showed no change from a fasting, morning baseline value of 1.1 ng/ml (normals 3.4-15.0 ng/ml). After seven hours of water deprivation there was a one-pound weight loss with no change in serum or urine osmolality. After five units of aqueous vasopressin, urine osmolality increased by 50 per cent to 352, consistent with partial diabetes insipidus.

Figure 2. Anteroposterior view of the sinuses showing almost complete opacification of the right maxillary sinus due to tumor.

Figure 3. Lateral skull films showing loss of definition of the sella turcica.

The patient was treated with L-thyroxine 0.1 mg. qd, hydrocortisone 30 mg. daily in divided doses and clofibrate 500 mg. tid for diabetes insipidus. Following replacement therapy and radiation, she had a 15-pound weight gain and an improved sense of well being.

Comments

This patient had evidence of both anterior and posterior pituitary insufficiency due to carcinoma within the sella turcica. She responded well to hormonal replacement and radiotherapy.

Autopsy studies of patients with carcinoma have shown that the pituitary is involved with metastatic carcinoma in 1.8 to 12 per cent of patients.[1-3]

In contrast to autopsy studies, the incidence of clinical hypopituitarism is even less frequent. Budde[5] reported a case of Simmond's disease with tumor deposits in the neck and lungs. The pituitary lesion was reported as a primary neoplasm; however, this may have represented metastatic disease. Piney and Coates[6] found one case of breast carcinoma with diabetes insipidus. Delarue[3] reported 33 of 280 autopsied cases with pituitary metastases but only one with diabetes insipidus. In a review of clinical features of tumor metastases to the pituitary, Houck[7] reported nine of 11 with diabetes insipidus and none with anterior insufficiency.

Epstein[18] reported a patient with metastatic small-cell carcinoma to the pituitary who experienced anterior insufficiency and the syndrome of inappropriate ADH secretion. At post mortem the entire posterior lobe was replaced by tumor which contained granules of arginine vasopressin. The largest study of pituitary metastases is reported by Teears and Silverman.[4]

Of 88 autopsied cases, five had evidence of diabetes insipidus and one had panhypopituitarism diagnosed antemortem. Pelosi[9] reported a case of metastatic thyroid carcinoma to the pituitary with thrombophlebitis of the cavernous sinus, meningitis, and resulting panhypopituitarism.

Oi[10] reported that three of nine patients with proven metastatic breast carcinoma had diabetes insipidus. Finally, Cox[11] reported a case of breast carcinoma with panhypopituitarism and suprasellar extension. Of all the cases reported, there were only five with clinical evidence of both anterior and posterior pituitary insufficiency.

Our case emphasizes that marked improvement may occur after recognition and treatment of pituitary insufficiency due to metastatic disease.

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Knowledge Of Virus Revolutionized

"BEING able to clone and determine the DNA sequence of the hepatitis virus has revolutionized our ideas of the virus itself," William J. Rutter, M. D., told physicians attending the American College of Physicians' (ACP) recent annual scientific meeting.

"The hepatitis B virus was previously thought to be more complicated than it actually is," said Doctor Rutter, the Chairman of the University of California, San Francisco's Department of Biochemistry and Biophysics.

"Until recently," he continued, "the hepatitis B virus and the disease itself have been difficult to study. The virus hasn't been cultivatable in tissue cultures, and a good animal model for the hepatitis virus hadn't been found."

By using recombinant DNA techniques, however, his laboratory has gained insight into the structure of the virus and how the virus replicates. These techniques also allow the researchers to clone the virus and determine precisely its DNA sequence, Doctor Rutter observed.

Although exactly how the virus causes liver disease is still being studied, scientists now are able to produce a particle which could be the basis for a vaccine against hepatitis B, he added.

Physician Burn-Out: Avoiding Being Your Own Worst Arsonist

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Physician "burn-out" affects most physicians at some point in their professional lives. Failure to recognize and treat the signs of this insidious and destructive process frequently leads to drugs, drink, divorce, and depression.

THE so-called physician burn-out syndrome is a democratic process—it will affect virtually all physicians to greater or lesser degrees at some point in their professional lives. He or she may be a practitioner, a faculty member or a resident. He works in an ICU, CCU, dialysis unit or on the oncology service with the incurable, the ungrateful, the demanding, the entitled, the cure-rejecters, and the physically and emotionally ill who tax and trouble us. And we react to these stresses in uniquely individual ways. What is a comfortable and an enjoyable level of stimulation or challenge for one physician is too much, too little or the wrong kind for another.

We maintain an ambiguous attitude regarding personal vulnerabilities. While we can readily recognize the presence of physical and emotional illness in our patients, we ignore, rationalize, temporize and deny these in ourselves.

Freudenberger coined the term "professional burn-out" in 1975 in his work describing the syndrome in mental health workers.[1]

The dictionary defines the word "burn-out" as "failing, wearing out, becoming exhausted by making excessive demands on energy, strength or resources." All the fuel is exhausted.

A Man Possessed

Have you seen the television commercial in which a bass voice narrates as a man prepares busily to leave home for work before sunrise:

> "The day cannot begin soon enough for a man possessed with a single aim in life . . . he is compelled by his desire to win.
>
> "While others cannot keep their mind on business, he can't keep his off of it. A stockbroker with this winning attitude has to have all the information and he has to have it first!"

The powerful words of this advertisement are supposed to sound virtuous:

> "Possessed with single aim in life."
>
> "Compelled by his desire to win."
>
> "He *can't* keep his mind off business."
>
> ". . . *all* the information, and he has to have it first."

Such attitudes and behaviors usually are associated with success, stalwart character and Prussian efficiency. The physician who has run the gauntlet from college, past medical school, internship and residency to his present practice and position has demonstrated similar character traits: singleness of purposes, conscientiousness, diligence and hard work—"He is compelled by his desire to win."

These admirable traits have their dark side. It often is this driven pursuit of excellence that sets the condition for "burn-out." Sadly, it often is the best and the brightest among us who experience "burn-out." The best feel it most when their drive for excellence is thwarted. Jimmy Carter was a textbook case of burn-out. The man came into office with the highest ideals. But when faced with tough-minded politicians and entrenched bureaucrats, he became disillusioned and withdrew. Remember his retreat to the Rose Garden?

Physicians Vulnerable

Like the ex-president, physicians often have character qualities which render them vulnerable to attack by "burn-out." We are exposed to environments of protracted stress. Most of us have strong needs for approval and high self-expectations. We derive much satisfaction from the results of our work. Herein lies the trap.

When work becomes the primary means by which we enhance our self-esteem, we may commit our time and energy beyond our resources. We pursue few activities outside of our work which provide enjoyment and satisfaction. Eventually, work performance suffers as fatigue and inefficiency set in, reducing the rewards in what has become our primary source of gratification.

So we try harder and spend more hours and waste our energy in a frustratingly vicious cycle —working more/deriving less.

It is impossible to keep the work-generated "burn-out" from following us into our home and social lives. Our marriages, social friendships, and relationships with our children begin to suffer, thereby depriving us of our main non-work source of support and satisfaction.

As the tensions outside work distance us from our loved ones, we take on more and more responsibility, increase our work schedule and seek out situations which only seem to increase emotional and physical pressures.

Exhaustion

Feelings of exhaustion and of being physically run down are present. We sleep poorly. We experience increasing headache and GI disturbance, which may be accompanied by weight loss. We feel short of breath. Our convivial ways and usual tolerance evaporate, leaving a quickness to anger, intolerance, frustration, suspiciousness and an overwhelming feeling of helplessness.

The dangers of self-medication can become all too real as we look to relief from tranquilizers, sleepers and alcohol.

Previously pleasant and grateful patients become critical as we spend less time with them. Previously admiring staff members begin to criticize us as we err, become irritable and hostile. Professional difficulties, coupled with a lack of external gratification and increased family distance and tension produce the burn-out syndrome in its most florid form.[2,4] We are in danger of the four D's of doctoring—drugs, drinks, divorce, depression.

Freudenberger said "it is a chronic condition which develops over a period of weeks, months or years. It is seldom acute, frequently passing unnoticed in its early stages because most burn-outs are competent, self-sufficient men and women who hide their weaknesses well."[1]

The consequences for those who "hide their weaknesses well" is illustrated by Edwin Arlington Robinson's "Richard Cory":

> ". . . and he glittered when he walked. and he was rich, yes richer than a king and admirably schooled in every grace: In fine, we thought that he was everything to make us wish that we were in his place. So on we worked and waited for the light and went without the meat and cursed the bread and Richard Cory, one calm summer night went home and put a bullet through his head."

Chronic stresses are a real and often unavoidable aspect of medical practice. The early recognition of our maladaptive responses to these stresses is the crucial point of preventing "burn-out."

Medical Society Discussion

In west Texas, the membership of a small county medical society, alarmed at the effect of burn-out, decided to approach the problem directly.[3] They brought the topic to the meetings with discussion, reports and alerts. The effect was profound. Dr. Kenneth Day of the Taylor Jones County Medical Society recalls:

> "This was a very moving experience. Many members began to improve their life style. The busiest surgeon in town packed up and moved to Cape Cod since his family was grown and educated. A pathologist and a family physician completed the Boston Marathon. I bought a condominium on a lake and spent more time with the family and friends. Other physicians started health programs that included jogging, other exercising, weight reduction, regular physical check-ups and decreased alcohol consumption."

These Texas physicians made a personal inventory and took positive action in re-thinking objectives, reshaping attitudes and behaviors, and in re-defining priorities and goals. They offer us 20 early warning signs of "burn-out." Let me pose them to you as questions:

Do you feel under pressure to succeed all the time?

Can you say "no" without guilt?

Are you bored?

Do you have hobbies outside medicine?

When was your last family vacation?

Do you feel a lack of closeness with people around you?

When did you and your spouse last have dinner together alone?

Are you unable to relax?

Are you increasingly disenchanted and cynical?

When did you last have fun?

Can you laugh at a joke about yourself?

Are you less involved; quiet in meetings, speak up less in general?

Do you automatically express negative attitudes?

Do you seem further behind at the end of the day?

Are you forgetting appointments and deadlines?

Are you increasingly irritable, short tempered, disappointed?

Is sex more trouble than it's worth?

Do you consider yourself unappreciated or used?

Reserve Personal Time

Like the prospectors at Sutter's Mill, California, in the 1849 gold rush who put their name in a tobacco can on a pile of rocks at the boundary, we too have to stake a claim to a portion of the day which is reserved for personal, non-medical use. A time to play. Remember play? Guilt-free time spent selfishly for the pure pleasure of it. For many physicians in jeopardy of "burn-out," fun and play have disappeared—replaced with the seemingly endless obligations and stresses of a physician's work.

Vacation time and time away from the office on a daily basis are to be guarded, cherished and utilized. It is play time. Travel, golf, love, fish, jog, tinker and putter. Laugh. Humor and mirth are wonderful protection from burn-out. It's good medicine. Norman Cousins cured himself of several resistant maladies by hours of laughing at Laurel and Hardy movies.

Vary your daily routines and share your concerns with your peers. If saddled with heavy administrative duties, get out from behind the desk. And recognize that the burden can be lightened by delegation of the responsibility and authority. Above all, give yourself permission to take care of yourself.

'Burn-Out' Preventable

Edgar Lee Masters, in *Spoon River Anthology*, wrote an epitaph of a man who had a life free of burn-out. "Fiddler Jones" never seemed to finish plowing his 40 acres because:

> "I never started to plow in my life that someone did not stop me in the road and take me away to a dance or picnic. I ended up with 40 acres, I ended up with a broken fiddle, and a broken laugh, and a thousand memories and not a single regret."

The process of physician burn-out is insidious and destructive, but preventable. The changes in our attitudes and behaviors which extinguish burn-out offer us an opportunity to practice medicine to its fullest rewards—and to experience a life of a "thousand memories and not a single regret."

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Medical Grand Rounds

From the West Virginia University Medical Center

Edited By
Irma H. Ullrich, M. D.
Associate Professor of Medicine

Gallstones

Discussant:
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Clinical Instructor in Medicine, Section of Gastroenterology

During the past 10-15 years gallstone disease has received enormous attention and publicity. The purpose of this brief review is to discuss the progress made in understanding the pathogenesis of gallstones. We will analyze the results of surgical treatment and look into the prospect of medical dissolution of cholesterol stones in the future.

Epidemiology

GALLSTONE disease is a major health problem in this country. According to the report of the National Commission on Digestive Diseases, it is the fifth leading cause of hospital admissions and doctors visits. It is estimated that 15-20 million Americans, at any one time, have gallstone disease.[1-2] About 800,000 new cases are diagnosed each year, and roughly 300,000-500,000 operations are done for this disease, leading to a direct loss of 3,000 lives and marked morbidity.

The disease is worldwide in distribution but its incidence differs in various countries and even in various ethnic groups within the same population. The highest incidence is recorded in American Indians where 70 per cent of females have the disease by the age of 30, and 80-90 per cent by age 70. The incidence is 25 per cent in males and 55 per cent in females in Sweden and Czechoslovakia (autopsy studies). This is followed by American whites and American blacks. The disease is rare in Japan and unheard of in some parts of Africa and in Eskimos.

The disease is more common in females, 2:1 to 4:1, and its incidence increases with age. Below age 20 the disease is very rare, increasing by 5-10 per cent with each decade after age 20.[1-2]

The disease is more common in certain groups such as diabetics, cirrhotics, obese people, clofibrate therapy, cholesterol-lowering diets, ileal bypass, and gallbladder carcinoma.

Nature of the Stones

The major component of gallstones is cholesterol. Although studies are limited on this aspect, an analysis of 331 stones from eight countries showed that 60 per cent of stones were pure cholesterol stones, 27 per cent were mixed, and 13 per cent did not have cholesterol in them.[3] The composition of stones in the United States is roughly the same — 60-70 per cent are pure cholesterol stones. It is this type of stone which is common, and it is this type which is amenable to medical dissolution, and it is this type to which we are going to refer in this discussion.

Pathogenesis

As early as 1500 A.D. physicians have wondered why gallstones form. Theories such as precipitation of impurities, by Paracelus, and burning of bile due to heat of the liver, by Kentman. were proposed. In 1892, Naunyn brought the disease into the limelight. In his classic article he postulated that gallstones were due to inflammation of the gallbladder. He also knew

that cholesterol was increased in bile from people with gallstones compared to normals.

This theory of Naunyn's was so convincing and logical that it was widely accepted, and remained with us for 70-80 years, although it was challenged in 1930. The real challenge occurred in 1968, when Admirand and Small published their classic article and put forward the theory that gallstones are the result of abnormal bile production. They supported and based their theory on solid ground by analyzing bile from people with gallstones, normals, and many animal species.

They postulated that the bile in people with gallstones contained more cholesterol than normal. They clearly demonstrated the importance of three lipids in bile, i.e., bile salts, 70-80 per cent; (2) cholesterol, 5-10 per cent, and phospholipids, 15-20 per cent. They also stated, rightly, that it is the relative proportions of the three lipids to each other that is important, rather than the absolute value of any of them.

They also presented their "triangular phase" diagram.[4] This was soon confirmed by others.[5,6]

Formation of Gallstones

Cholesterol stones form in four stages: 1. secretion in supersaturated bile; 2. crystalization of cholesterol; 3. stone formation, and 4. clinical disease.

In order to understand supersaturated bile, one must understand clearly the three important lipids in bile, namely, cholesterol, bile salts and lecithin, and their origin and relative ratios.

Cholesterol in the body comes from two sources, diet and synthesis in the body. Virtually every cell in the body is capable of synthesizing cholesterol, but excretion is only through bile. Cholesterol is synthesized from acetyl Co-A through HMG-CoA reductase by hepatocytes. It is this cholesterol which is important in the pathogenesis of gallstones. Once synthesized, cholesterol is either excreted as such or converted to bile salts.

Cholesterol is converted to bile salts under the influence of a group of enzymes, 7 alpha-hydroxylases. By the hydroxylation process, cholesterol is converted to tri-hydroxy and di-hydroxy cholesterol compounds respectively called cholic acid and chenodeoxycholic (chenic) acids. These two are called primary bile acids. Once formed they are conjugated with glycine and taurine and converted to the corresponding glycolic and taurocolic salts. More cholic acid is synthesized than chenic acid, and more glycine salts are made than taurine salts because more glycine is available in the body.

These are excreted in the bile, and they have three functions: facilitate water and electrolyte excretion by biliary ductules; keep cholesterol in soluble form; and, in the gut, they help in digestion of fats.

Absorption

Most of these bile salts are absorbed passively from the upper intestine. A major portion is absorbed actively by the terminal ileum. Five to 10 per cent of bile salts are acted upon by bacterial enzymes cholyl amidases of gram positive rods and anaerobes. There are two results: (a) deconjugation and (b) dehydroxylation and removal of OH group from position seven. These are very specific functions of these bacterial enzymes.

As a result, two secondary bile acids are derived, deoxycholic acid from cholic acid, and lithocholic acid from chenic acid. These two secondary bile acids are reabsorbed, and their functions are to add to the total bile salt pool, and to regulate 7 alpha hydroxylases and HMG-CoA reductase activity. Lithocholic acid which is toxic to many animal livers is inactivated and excreted. This is the so-called enterohepatic circulation which has been reviewed in many good articles.[7,8,9]

Lecithin is coupled with excretion of bile salts. In normal bile the ratio of these liquids is: bile salts, 60-80 per cent; cholesterol, 5-10 per cent, and lecithin, 10-15 per cent.

Depending on the ratio of these lipids to each other, bile can be either: 1. Unsaturated — bile to which more cholesterol can be added; 2. Saturated — bile to which no more cholesterol can be added, or 3. Supersaturated — bile in which there are already cholesterol crystals present.

Supersaturated bile may be produced by increased production of cholesterol, decreased production or loss of bile salts, or a combination of the two.

Once bile is supersaturated, crystallization of cholesterol will occur and stones will form. The role of the gallbaldder in stone formation is not at all clear, but it may contribute by[10] desquamation of epithelium, providing a nidus for stone formation; and inflammation and absorption of bile salts and water, making bile supersaturated. Disturbed motility of gallbladder and abnormal tone of the sphincter of Oddi may be important.

Course of Gallstones

Once stones are formed, there can be three results: (1) they remain silent; (2) they cause clinical disease, or (3) complications can develop.

The question that arises is what to do when gallstones are discovered. This subject is as controversial today as it was to physicians in 1911, when Willis Mayo published his article and said "innocent gallstones, a myth" and that cure is achieved only by surgery. Simultaneously, William Olser warned that operation should not be done unless the patient had had many episodes of biliary colic.

Although there is still some controversy, certain guidelines could be used to manage patients with gallstones:

If patient is symptomatic and has stones or a non-functioning gallbladder, operation is clearly indicated.

The question becomes difficult when it comes to silent stones. There are very few studies about the natural history of gallstones, but those we have show that if silent gallstones are followed for 10 years, 50 per cent will remain asymptomatic, 30 per cent will become severely symptomatic, and 20 per cent will have serious complications of gallstones.[11,12,13]

Not all patients will give consent for surgery because they may not agree that an operation is needed if there are no symptoms; surgery has its own morbidity and mortality.

The surgical mortality of elective surgery on the gallbladder is 1.5 to 1.8 per cent and, in acute cholecystitis, three per cent. If there are complications of stones, mortality increases to six to seven per cent. In addition to this, there is definite morbidity due to the surgery, and it is obvious that these risks, although small, will be difficult to assume for asymptomatic patients. The medical treatment may be an alternative to surgery.[14,15,16]

Medical Treatment

Once the pathophysiology of supersaturated bile was understood, it did not take long to realize that if the chemical nature of bile is changed, stone formation could be prevented and existing stones could be dissolved. It was proven in experimental animals that by increasing bile salts in bile, dissolution was possible. In the early 1970s there were many encouraging reports of dissolution of gallstones.[18,19,20] There not only was pressure from the public but also from the medical community that medical therapy with chenodeoxycholic acid be made available. A National Cooperative Study therefore was conducted for two years to evaluate the efficacy of medical therapy with chenic acid.[17] The results of this study were rather disappointing because the dissolution rate was much lower than expected, and there were significant problems.

It became clear that although dissolution is an exciting prospect, it is far from perfect. One also must realize that before putting a patient on therapy the following criteria must be met: the stone must be asymptomatic, it must be radiolucent, and the gallbladder must be functioning on oral cholecystogram.

Also, it is difficult to say how to detect a silent gallstone. Once treatment is completed, what will happen? Will the stone come back? Is prophylaxis necessary? What about safety of long-term use? Is it cost effective?

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Manuscript Information

Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be typewritten, triple-spaced, on one side only of firm (no onion skin or flimsy), standard letter sized (8 ½ by 11 in.) white paper. Wide margins (at least 1 ¼ in. on left) should be left free of typing. On the first or title page should be shown the title of the article, the name (or names) of the author, and his degrees. Pages should be numbered consecutively, the page number being shown in the right upper corner along with the surname of the author.

Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

A short abstract summarizing the manuscript should be included. This should be typed in double space on a separate page.

Authors are requested to submit a carbon copy with the original.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for reproduction should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. Cost of printing black and white photos in excess of 4 will be billed to author, and no more than 25 references will be published free of charge to the author. A legend should be provided for each illustration and, preferably, attached to it.

All scientific material appearing in *The Journal* is reviewed by the Editorial Board. Manuscripts should be mailed to The Editor, West Virginia Medical Journal, Box 1031, Charleston, W. Va. 25324.

115th ANNUAL MEETING

of the

West Virginia State Medical Association

The Greenbrier

AUGUST 26-28, 1982

PLAN NOW TO ATTEND

A message from . . .

The President

UNITY AND STRENGTH

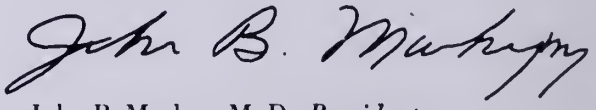
A year, at its beginning, seems a very long time, but the days become weeks, then months, and a year passes. Many things are left unsaid and unfinished. Beginnings are made, but the ship of our Association moves ponderously slow, so the desired ends are not always achieved. In some respects, it is good that we move slowly and deliberately; thus we may avoid acts not in the best interest of the public we serve and the Association of which we are members. Conversely, if we move too slowly, the moment for positive action may be lost.

During the past year, as we have travelled the state visiting the component societies, I have been impressed by two diverse attitudes. The first is one which advocates almost immediate action on any and all matters we face, even if these acts may be precipitous and potentially harmful to our desired goal. The second attitude is, I feel, much worse and more dangerous to our cause. This is apathy. In my comments throughout the state, I have tried to dispel this attitude of apathy and replace it with an attitude of commitment to a stronger, more viable and responsive State Association. To achieve this requires the input of more and more of our members.

There is a third attitude or approach, which would better serve us and is more consistent with the mainstream of our members. This is one of thoughtful, calculated action that would provide solace for the first group I spoke of. It also may provide incentive for the apathetic group to become more involved.

There is no doubt that in the future we as individuals will seek the unity and strength that the State Association can provide. This will come about as a result of several factors. These factors, in brief, are those that weigh on us in providing medical care to our patients as we now do. Only a strong, unified Association will be able to prevent changes that would not be in the best interest of the patient we serve and of high-quality medical care. It is my hope that it is not some catastrophic change that would bring about that stronger and more unified Association, an Association that embodies totally the concept upon which it was established and upon which it stands.

I look forward to seeing all of you at our Annual Meeting.



John B. Markey, M. D., *President*
West Virginia State Medical Association

The West Virginia Medical Journal

Editorials

The Publication Committee is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author shall be held entirely responsible. Editorials printed in The Journal do not necessarily reflect the official position of the West Virginia State Medical Association.

Physicians, as leaders in the health care field, truly must LEAD. . . .

They have a first and foremost obligation to provide for ALL patients, without reservation and regard to category, the highest quality of medical care possible on a cost-conscious and cost-efficient basis. . . .

If a piece of proposed legislation is right, work for it. If it is wrong for those physicians serve, oppose it. But regardless, work on legislative issues the year around so senators and delegates know physicians' views. . . .

QUALITY CARE FOR EVERYONE

These are key thoughts which have been heard in the valleys and across the mountains this year as John B. Markey, M. D., has carried the message to his colleagues as President of the West Virginia State Medical Association.

Now, as of August 28, Harry Shannon, M. D., of Parkersburg picks up the torch and sets out on his year of leadership. He'll have some new ideas of his own. Each President does. But there will be a strong, underlying thread of continuity in such areas as legislative emphasis and long-range planning.

John Markey, with Betty constantly at his side, has been an effective, forceful President. He has done his homework on key issues of the day, and left no doubt as to his stand on them. His monthly President's Page in *The West Virginia Medical Journal* has been a key reflection of his thoughts and preparation—and consistently has thrown out a challenge to his physician readers.

Doctor Markey, like those before him, has had his share of frustrations. There remain difficult problems with third-party programs. Some other things, such as revitalized Association committee activity, did not move as rapidly as he had hoped and envisioned. But as he undoubtedly learned, a year is a short time. The hours and days run out just as the engine is building a full head of steam.

There's no doubt, however, that Doctor Markey has given the Medical Association new strength and credibility. Membership figures amid troubled economic conditions are one indicator of this. Repeated, positive reaction from component societies, and John Markey visited some 22 of those, have added fuel to the Association boiler.

Meanwhile, Doctor Shannon has been watching, listening and learning, while at times stepping in to help Doctor Markey through schedule conflicts. Now Doctor Shannon moves into the "catbird seat" made famous by baseball announcer Red Barber.

At times, it also will remain the "hot seat." The nature of the times, and the ever-increasing demand for quality, cost-effective medical and

John B. Markey, M. D.

health care, will guarantee that. The state's physicians need to keep that basic fact constantly in mind, and give Harry Shannon the support and assistance he will need. We think the physicians will do exactly that.

The American Medical Association House of Delegates has reviewed periodically and reaffirmed its position that medical staffs should have physician representatives on hospital governing boards. Specifically, AMA policy says:

BOARD ROLE

"Where legally permissible, physicians actively practicing in the community who are voting members of the medical staff shall be eligible for, and should be accorded, membership on hospital governing bodies and their action committees, with full voting privileges, in the same manner as are other knowledgeable and effective individuals."

It should be noted that the AMA has not sought to determine percentages of representation on or composition of hospital governing boards. On the contrary, it has questioned the wisdom and practicality of establishing such requirements.

The Joint Commission on Accreditation of Hospitals, in its standards for governing boards, has supported medical staff membership. In the 1982 *Accreditation Manual for Hospitals*, standard III of the section on governing body reads:

"When not legally prohibited, physicians who are members of the medical staff shall be eligible for, and should be included in, full membership on hospital governing bodies and their action committees in the same manner as are other knowledgeable and effective individuals.

"The hospital medical staff shall have the right of representation (attendance and voice) at meetings of the governing body by means of one or more medical staff members selected by the medical staff. The governing body shall have a written conflict-of-interest policy that addresses disclosure and guidelines for resolution."

The hospital governing body has the overall responsibility for the conduct of the hospital in a manner consonant with the hospital's objective of delivering a high quality of patient care. But the excellence of hospital management is not solely the responsibility of the governing body and administration.

The medical staff also must be concerned with, and bear responsibility for, the quality and efficacy of matters relating to patient care in the hospital. As such, the medical staff should be considered an integral part of the medical policy-making and management of the hospital.

The procedure for appointing physicians as members of the board of trustees should be established by the hospital's constitution and by-laws, taking into consideration any laws and regulations of the state and local government.

Our Readers Speak

Balanced Budget Needed

The Problem: Runaway Federal Spending

Needed: An Amendment to the Constitution for a Balanced Budget

Many of America's economic problems—inflation, unemployment, and low productivity—can be traced to excessive spending by the federal government. A constitutional amendment is needed to correct the strong bias in our political system for higher spending. It will curb federal spending, limit taxes, reduce inflation and balance the federal budget on a regular basis.

The key reason for excessive spending is pressure group politics. Well organized, rich special interest groups make strong demands on Congress for programs from which they will greatly benefit. This places the congressman in a tough position. If he votes against the pet project of any one of these interest groups, he risks incurring their wrath. He is often under pressure to pay back a political favor to one of his colleagues. But there is little pressure to oppose these demands because the costs of the projects are spread thinly over all the taxpayers. The result is that the total of government spending is higher than the voters would approve if given a chance.

Deficit spending helps hide the costs of pressure group politics in the form of borrowing, inflation and reduced economic growth. Inflation automatically bumps people into higher tax brackets even when they are not really earning more. Thus the political risk of raising taxes to pay for more spending can be avoided.

Taxpayers inadvertently help push through deficit spending because, once taxes are paid, it's in each citizen's self-interest to obtain and lobby for as many "free" government benefits as possible.

There Is A Solution

On May 19, 1981, the U. S. Senate Judiciary Committee approved, by an 11-5 vote, a constitutional amendment to balance the federal budget and limit federal taxes. The proposed amendment, bill number S.J. Res. 58, was specifically drafted, after much study, to remove the effects of pressure group politics and the bias in our political system for unbalanced budgets and excessive taxes. S.J. Res. 58 was designed to attract as much support as possible. It will literally force Congress to balance the books and eliminate excessive spending.

What You Can Do

If you agree that America needs a constitutional amendment to require a balanced federal budget and limited federal taxes, we urge you to write your two U.S. Senators and urge them to support the amendment. Refer to bill number, S.J. Res. 58 in the Senate. Your Senators' address is: Senate Office Building, Washington, D.C. 20510. The Congress will vote finally on this very soon.

Paul Francke, Jr., M. D.
301 Medical Arts Building
Charleston 25301

GENERAL NEWS

475 Doctors, Others Expected For 115th Annual Meeting

Some 475 physicians, spouses and others are expected to attend the 115th Annual Meeting of the State Medical Association August 26-28 at the Greenbrier in White Sulphur Springs.

The Program Committee reported that arrangements are complete for the combined business and scientific event.

The schedule for the three-day convention includes two sessions of the Association's House of Delegates, two general scientific sessions, and addresses by the President of the American Medical Association and a top federal health official. There will be nearly 30 scientific exhibits for viewing by conventioneers.

Some 18 affiliated societies, sections and committees of the Association, and other medical groups also will have business and scientific sessions on Friday and Saturday, primarily in the form of breakfast and luncheon meetings.

See the official program and related articles in this issue of *The Journal* for specific convention activities and speakers.

Dr. Harry Shannon of Parkersburg, during the second House Session on Saturday, will be inaugurated as Association President to succeed Dr. John B. Markey of Charleston.

AMA President to Speak

Dr. William Y. Rial of Swarthmore, Pennsylvania, the AMA President, will address the first House session Thursday afternoon; and Dr. Edward N. Brandt, Jr., Assistant Secreary for Health in the U. S. Department of Health and Human Services in Washington, will deliver the keynote Thomas L. Harris Address during the opening exercises Friday morning.

The first general session, a "Symposium on Common Disorders of the Eye, Ear and Mouth," will follow the opening exercises Friday morning. Subjects to be addressed during the second general session Saturday morning will be plastic surgery, urology, arthroscopic surgery, and neurosurgery.

The scientific session speakers, some of whom also will give talks at the affiliated society and section meetings, have been announced in previous issues of *The Journal*. As noted, they are listed in the official program appearing in this issue.

Doctor Markey, a surgeon, will deliver his Presidential Address at the second House session on Saturday. Doctor Shannon, the incoming President, is a urologist and a former Chief of Staff at Camden Clark Memorial Hospital in Parkersburg.

Scientific Exhibit Schedule

The scientific exhibits, again to be housed in Eisenhower Hall, will be open from 1 to 5 P. M. on Thursday, and from 8:30 A. M. to noon on Friday and Saturday. The exhibits are listed elsewhere in this issue of *The Journal*. In order to provide convention registrants with ample opportunity to visit the exhibits, coffee breaks for that purpose have been scheduled during the general scientific sessions. The two general ses-

Harry Shannon, M. D.

Convention Timetable

The first general scientific session will follow 9 A.M. opening exercises on Friday, August 27. The Saturday session will begin at 9:15 A.M.

The first session of the House of Delegates will be on Thursday afternoon, August 26, beginning at 2:30. The second session will be on Saturday afternoon beginning at 3:00.

sions Friday and Saturday mornings will be held in the theater, which adjoins Eisenhower Hall.

The Association's Council will hold a preconvention meeting at 9:30 A. M. Thursday.

The convention will end with a reception for new officers Saturday evening.

Serving on the Program Committee are Drs. Carl J. Roncaglione, South Charleston, Chairman; Jean P. Cavender, Charleston; Thomas P. Long, Man; David Z. Morgan, Morgantown; Kenneth Scher, Huntington, and Doctor Shannon.

The Annual Meeting of the Auxiliary to the Stae Medical Association, with Mrs. Logan W. Hovis of Vienna in charge as the Auxiliary's President, again will run concurrently with the Association's convention. The official Auxiliary program also appears in this issue of *The Journal.*

AMA Publication Available

Copies of *Current Opinions of the Judicial Council of the American Medical Association 1982* may be obtained by directing orders to: Current Opinions (OP-122), American Medical Association, P.O. Box 821, Monroe, WI 53566.

The price is $5 each for one to 10 copies; $4.50 each for 11 to 49 copies, and $4 each for 50 or more copies. On orders of $10.99 or less, add $1.50; $11 or more, add $2.50. For special handling (UPS), add $3.

Luncheon For Past Presidents

A luncheon honoring Past Presidents of the West Virginia State Medical Association will be held at the Greenbrier on Friday, August 26, during the 115th Annual Meeting.

Dr. L. Walter Fix of Martinsburg, immediate Past President, will preside, and invitations have been extended to all the Association's Past Presidents.

Black Lung Program Moves To Automated System

The U. S. Department of Labor has negotiated a contract with Electronic Data Systems (EDS) to begin automated processing of the Federal Black Lung Program's medical bills (claims) on August 15, 1982. In addition to providing the program with greater accountability, the new system will be able to serve physicians and other providers more efficiently.

EDS plans to install a toll-free WATS line at its central office location in Washington, where a telephone inquiry staff will have ready access to the status of bills. Additionally, for each week that a payment is issued to a physician, he or she will receive a remittance and status report which itemizes each bill that was paid or denied for that week. EDS also said it will assign a field representative to West Virginia to work directly with physicians and others.

Several changes in the billing requirements for the program will be necessary, Labor said. In response to numerous requests by providers and provider associations for standard billing forms, the Black Lung Program is adopting the Standard AMA-HCFA 1500 as the official billing form for professional services (including durable medical equipment and supplies) and the American Hospital Association's newest Uniform Bill, the UB-82 (for inpatient, outpatient and skilled nursing facility services). Submission of Black Lung Program bills on these forms will be mandatory by December, 1982.

Also crucial to the success of the program will be the requirement of precoded claims. Coding of diagnoses with ICD-9-CM diagnoses codes and coding of procedures with CPT-IV procedure codes will be necessary for bills to be processed efficiently. (Durable medical equipment and oxygen supplies which are not currently covered by CPT-IV codes will be assigned special five-digit codes by the Black Lung Program.)

Complete billing instructions and lists of common diagnoses and procedure codes will be provided by EDS in August. Until that time, physicians should continue to submit bills in the usual manner.

In preparation for the new system implementation, the Department of Labor is confirming and expanding the provider information on file. In conjunction with the effort, it will ask physicians to complete a new information form. Timely receipt of this information is necessary to develop the system-generated remittance and status reports for physicians.

WVU Football Weekend CME Sessions Scheduled

Three-hour continuing medical education sessions at the West Virginia University Medical Center on the Saturday mornings of home football games are scheduled again this fall.

The schedule of CME topics, with the home football game designated in parentheses, follows:

September 18 (Maryland), "Carcinoma of the Esophagus, Pulmonary Trauma" (Final day, Annual Meeting of West Virginia Chapter, American College of Surgeons); September 25 (Richmond), "Internal Medicine Topics of General Interest to Physicians" (Final day of Annual Internal Medicine Days);

October 9 (Boston College-Homecoming), "Follow-up of Abnormal Pap Smear, Helping Parents Cope with Perinatal Death, Sexuality and Pregnancy" (Final day of OB/GYN Teaching Days); October 23 (Penn State), "Orthopedics for the Family Practitioner" (Final day of Eighth Annual Hal Wanger Family Practice Conference);

October 30 (East Carolina), "Trigeminal Neuralgia, Maxillofacial Injuries, Common Skin Diseases;" and November 20 (Syracuse), Sports Medicine Topics" (Final day of Third Annual Sports Medicine Symposium).

Approved CME Credit

All but one of the Saturday morning sessions (as noted) will constitute the final day of a scheduled annual conference. The October 30 session is designed for both physicians and dentists with topics of mutual interest.

Each session is approved for three hours of credit in Category 1 of the Physician's Recognition Award of the American Medical Association.

The instructional fee (including parking, continental breakfast and lunch) for all six sessions is $200; for each session individually, $40.

Football tickets may be purchased for $11 each; additional luncheon tickets, $5 each.

Since rooms in Morgantown are in high demand on Friday nights before home games, the WVU Office of Continuing Medical Education suggests that reservations be made immediately.

Checks should be made payable to West Virginia University Foundation, Inc., and mailed to: Office of Continuing Medical Education, WVU School of Medicine, 104 Basic Sciences Building, WVU Medical Center, Morgantown 26506.

For additional information, telephone the Office at (304) 293-3937.

Wide Range Of Exhibits Set For Convention

Physicians, spouses and others are urged to view the exhibits which will be on display during the State Medical Association's 115th Annual Meeting at the Greenbrier in White Sulphur Springs.

A larger number of exhibits than usual (some 28 as *The Journal* went to press) will present a wide range of subjects of interest.

The exhibits will be located in Eisenhower Hall, on the Shop Floor and adjacent to the theater. Exhibit hours will be from 1 to 5 P.M. on Thursday, August 26, and from 8:30 A.M. to noon on Friday and Saturday.

Coffee breaks during the scientific sessions of the convention Friday and Saturday mornings in the theater will be provided for visiting the exhibits.

Nominating Committee To Meet On Friday, August 27

The State Medical Association's Committee on Nominations will hold a 5 P.M. meeting on Friday, August 27, in the Washington Room of the Greenbrier.

Under a 1980 By-Laws amendment, the Committee will submit to the House of Delegates at least two nominess for the following offices: Vice President and Treasurer, and Delegate and Alternate to the American Medical Association. Only the name of one nominee will be necessary for the President Elect.

Association By-Laws also provide that nominations may be made from the floor for these offices, to be filled by the House in balloting at its final session on Saturday, August 28, the final day of the Association's 115th Annual Meeting.

Dr. Robert D. Hess of Clarksburg will serve as Chairman of the Committee on Nominations, with other members to include: Drs. William L. Mossburg of Fairmont, Leo H. T. Bernstein of Martinsburg, Robert R. Rector of Elkins, Michael J. Lewis of St. Marys, Thomas F. Scott of Huntington, Joe N. Jarrett of Oak Hill and Diane E. Shafer of Williamson.

The 1982 Program Committee

Chairman of the Program Committee for the 115th Annual Meeting of the West Virginia State Medical Association is Dr. Carl J. Roncaglione of South Charleston. Other Committee members are Drs. Jean P. Cavender of Charleston, Thomas P. Long of Man, David Z. Morgan of Morgantown, Kenneth Scher of Huntington, and Harry Shannon of Parkersburg.

AMA Telephone Survey

Telephone calls on behalf of the American Medical Association are being made to certain physicians around the nation in a Socioeconomic Monitoring Systems (SMS) survey. The AMA is asking the cooperation of physicians in accepting the calls from Chilton Research Services. Physicians in the sample survey should receive a letter from the AMA requesting their help prior to being called by Chilton.

No Registration Fee for Members

Members of the West Virginia State Medical Association will not be assessed a registration fee for the 115th Annual Meeting at the Greenbrier in White Sulphur Springs, August 26-28.

Interns, residents and medical students also will be registered without charge.

There will be a registration fee of $50 for out-of-state physicians attending the meeting.

Doctor Fix Vice President Of National Group

L. Walter Fix, M. D., of Martinsburg, the State Medical Association's immediate Past President, was elected Vice President of the national Organization of State Medical Association Presidents (OSMAP) at a June business meeting of that group in Chicago.

Normal succession calls for Doctor Fix to become President of OSMAP next June. The organization membership is open to current state medical association/society presidents; presidents elect, and past presidents.

For the past year, Doctor Fix has served as a member of OSMAP's Steering Committee.

School Medical Post Open

The position of Medical Consultant for Kanawha County Schools is vacant, it was announced. Duties of the post include: implementing medical examinations for the personnel office; acting as medical advisor for Pupil Services Committee meetings; and consulting with the Office of Health Services staff members regarding health/medical problems of students.

Applicants should hold an M. D. degree and a license to practice medicine in West Virginia. They may contact Cy J. Faris, Assistant Superintendent, Division of Personnel, Kanawha County Schools, 200 Elizabeth Street, Charleston 25311. Telephone 348-7753.

West Virginia's delegation found plenty of reading material as it prepared for reference committee and floor deliberations during the regular meeting of the American Medical Association's House of Delegates in Chicago in June. Pictured from left to right are Drs. Jack Leckie of Huntington, an Alternate Delegate to the House; John B. Markey of Charleston, the State Medical Association President; Harry S. Weeks, Jr., of Wheeling, one of the state's two Delegates, and Stephen D. Ward, also of Wheeling, a Past President of the State Association and member of the AMA's Council on Legislation.

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1982, as compiled by Dr. Robert L. Smith, Assistant Dean for Continuing Education, and J. Zeb. Wright, Ph. D., Coordinator, Continuing Education, Department of Community Medicine, Charleston Division. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of The Journal.)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Morgantown, Charleston and Wheeling campuses. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, 3110 MacCorkle Avenue, S. E., Charleston 25304; Office of Continuing Medical Education, WVU Medical Center, Morgantown 26506; or, Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

Sept. 11, Oklahoma City, OK. Trauma (prior to WVU-Oklahoma football game)

The schedule of CME topics for the Saturday morning football weekend sessions to be presented at the WVU Medical Center in Morgantown (with the football game designated in parentheses) is as follows:

Sept. 18 (Maryland), Carcinoma of the Esophagus, Pulmonary Trauma (final day, annual meeting of WV Chapter, American College of Surgeons)

Sept. 25 (Richmond), Internal Medicine Topics of General Interest to Physicians (final day of Annual Internal Medicine Days)

Oct. 9 (Boston College-Homecoming), Follow-up of Abnormal Pap Smear. Helping Parents Cope with Perinatal Death. Sexuality and Pregnancy (final day of OB/GYN Teaching Days)

Oct. 23 (Penn State), Orthopedics for the Family Practitioner (final day of 8th Annual Hal Wanger Family Practice Conference)

Oct. 30 (East Carolina), Trigeminal Neuralgia, Maxillofacial Injuries, Common Skin Diseases

Nov. 20 (Syracuse), Sports Medicine Topics (final day of 3rd Annual Sports Medicine Symposium)

For your planning, following is a list of the conferences associated with the Football Weekend Continuing Medical Education offerings:

Sept. 17-18, WVU Chapter of the American College of Surgeons

Sept. 24-25, Internal Medicine Days

Oct. 8-9, OB/GYN Teaching Days

Oct. 21-23, 8th Annual Hal Wanger Family Practice Conference

Nov. 19-20, 3rd Annual Sports Medicine Symposium

Sept. 30-Oct. 1, Morgantown, Current Controversies in Total Knee Replacement

Oct. 16, Charleston, Occupational Health 1982

Oct. 21, Charleston, Management of the Violent Patient

Nov. 5-6, Morgantown, Diagnostic Ultrasound Update

Nov. 5-6, Morgantown, Suspected Brain Damage: An Introduction to Early Intervention

Nov. 8., Charleston, Pastoral Care

Regularly Scheduled Continuing Education Outreach Programs from WVU Medical Center/ Charleston Division

Buckhannon, St. Joseph's Hospital, 3rd floor, 3rd Thursday, 7-9 P. M.—August (summer vacation).

Sept. 16, "Anxiety: The Therapeutic Dilemma," Donald Robinson, M. D.

Oct. 21, "Quality Control/Medical Malpractice in WV" (a special program in cooperation with the WV State Medical Assn.), Joseph Skaggs, M. D., and Fred Bockstahler.

Cabin Creek, Cabin Creek Medical Center, Dawes, 2nd Wednesday, 8-10 A. M.—Aug. 11, "Dysfunctional Uterine Bleeding," Robert D. Patchell, M. D.

Sept. 8, "Quality Control/Medical Malpractice in WV" (a special program in cooperation with the WV State Medical Assn.). Speaker to be announced.

(continued on next page)

Gassaway, Braxton Co. Memorial Hospital, 1st Wednesday, 7-9 P. M.—Aug. 4, "Peridontal Disease: Recognition and Management," Wayne Given, D. D. S.

Sept. 1, "Quality Control/Medical Malpractice in WV" (a special program in cooperation with the WV State Medical Assn.). Speaker to be announced.

Oct. 6, "Sudden Infant Death Syndrome: Implications for Rural Practitioners," David Z. Myerberg, M. D.

Madison, Allied Health Room, Boone Career Center, West Madison, 2nd Tuesday, 7-9 P. M. —Aug. 10, "Evaluation & Treatment of Thyroid Nodules," Richard Kleinmann, M. D.

Sept. 14, "Quality Control/Medical Malpractice in WV" (a special program in cooperation wtih the WV State Medical Assn.). Speaker to be announced.

Oak Hill, Oak Hill High School (Oyler Exit, N 19) 4th Tuesday, 7-9 P. M.—August (summer vacation).

Sept. 28, "Quality Control/Medical Malpractice in WV" (a special program in cooperation with the WV State Medical Assn.), Joseph Skaggs, M. D., and Fred Bockstahler.

Oct. 26, "Approach to the Peripheral Vascular Patient," Robert Leadbetter, M. D.

Welch, Stevens Clinic Hospital, 3rd Wednesday, 11 A. M.-1 P. M. — Aug. 18, "Behavioral Problems in Children & Adolescents," Henrietta L. Marquis, M. D.

Sept. 15, "Questions & Answers: Cardiology," Stafford Warren, M. D.

Oct. 20, "Sudden Infant Death Syndrome: Implications for Rural Practitioners," David Z. Myerberg, M. D.

Nov. 17, "Quality Control/Medical Malpractice in WV" (a special program in cooperation with the WV State Medical Assn.). Thomas Potterfield, M. D., and Fred Bockstahler.

Whitesville, Raleigh-Boone Medical Center, 4th Wednesday, 11 A. M.-1 P. M.—August (summer vacation).

Sept. 22, "Quality Control/Medical Malpractice in WV" (a special program in cooperation with the WV State Medical Assn.). Speaker to be announced.

Williamson, Appalachian Power Auditorium, 1st Thursday, 6:30-8:30 P. M.—August (summer vacation).

Sept. 2, "Quality Control/Medical Malpractice in WV" (a special program in cooperation with the WV State Medical Assn.). Joseph Skaggs, M. D., and Fred Bockstahler.

Oct. 7, "Sudden Infant Death Syndrome: Implications for Rural Practitioners," David Z. Myerberg, M. D.

A breakfast caucus gave the West Virginia delegation an opportunity to discuss issues before the American Medical Association's House of Delegates during its annual meeting in June in Chicago. Pictured here from left to right are Drs. Frank J. Holroyd of Princeton, one of West Virginia's two Delegates to the AMA House; Carl R. Adkins of Oak Hill, the State Association's Vice President; Harry Shannon of Parkersburg, the Association President Elect, and L. Walter Fix, Martinsburg, Past President and Council Chairman who was elected Vice President of the Organization of State Medical Association Presidents (OSMAP) during a concurrent Chicago meeting.

1982 Scholarship Winners Announced By Committee

The West Virginia State Medical Association has awarded to another four state residents four-year scholarships to the West Virginia University and Marshall University Schools of Medicine. Each scholarship is worth $1,500 annually, or $6,000 total.

Here are the 1982 selections of the Association's Committee on Medical Scholarships, as announced by the Committee Chairman, John Mark Moore, M. D., of Wheeling, after an annual Committee meeting early in June in Bridgeport:

Susann Lea Lovejoy of Yawkey, Lincoln County, who will enter the Marshall School of Medicine this year; and Michael Willford Halley of Charleston, Daniel Scott Frame of Frametown, Braxton County, and Paul Yeaton, Morgantown, who will be first-year students at the WVU School of Medicine.

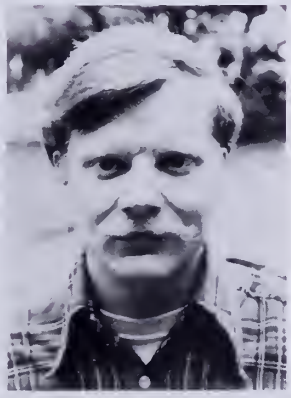
Miss Lovejoy, daughter of Mr. and Mrs. Harry Lovejoy of Yawkey, received a B. S. degree in chemistry at West Virginia State College in December, 1981.

Halley also is a West Virginia State graduate, receiving a B. S. in chemistry in the spring of 1982. He is the son of Mr. and Mrs. Arles B. Halley of Sissonville Drive in Charleston.

Susann Lea Lovejoy

Michael W. Halley

Daniel S. Frame



Paul Yeaton

Frame received a B. S. degree in biology this spring from West Virginia Wesleyan, and is the son of Mr. and Mrs. Norman L. Frame of Frametown.

Yeaton, the son of the late Bertrand Yeaton and Mrs. Augusta Comstock, is a native of Windsor, Vermont, who has resided in West Virginia since 1974. He has completed three years of study at WVU, majoring in biology, and will receive his undergraduate degree upon completion of another 17 semester hours of work.

The new awards bring to 64 the number of scholarships granted by the Medical Association since its program began in 1958. One scholarship was granted annually until 1962, when the number was increased to two. In 1974, the Association began awarding four scholarships annually.

Financial need is the major factor considered by the Committee on Medical Scholarships. Under provisions of agreements they sign, scholarship recipients must agree to practice in West Virginia for four years following graduation and completion of postgraduate training and military obligations.

Over the years, about 75 per cent of the scholarship recipients who have completed their training have entered practice in West Virginia, a result in line with the program objective encouraging additional young physicians to establish careers here.

Other members of the Committee on Medical Scholarships are Drs. R. L. Chamberlain of Buckhannon, Marshall J. Carper of South Charleston, Robert D. Hess of Clarksburg, Thomas J. Holbrook of Huntington, James T. Hughes of Ripley, Kenneth G. MacDonald of Charleston, William L. Mossburg of Fairmont, an earlier scholarship recipient, and Clark K. Sleeth of Morgantown.

WVU Course In Oklahoma

"Trauma" will be the subject of a continuing medical education course to be held Saturday morning, September 11, in Oklahoma City, Oklahoma, prior to the West Virginia University-Oklahoma football game. The course, which also is open to dentists, has been approved by WVU, the sponsor, for four hours of credit in Category 1 of the Physician's Recognition Award of the American Medical Association.

Details for travel arrangements may be obtained by contacting the Morgantown Travel Service. Telephone (304) 292-8471.

Auxiliary Completes Program For 58th Annual Meeting

Mrs. Torrence P. B. Payne of Newburgh, New York, will be among honored guests when the Auxiliary to the West Virginia State Medical Association holds its 58th Annual Meeting at the Greenbrier in White Sulphur Springs August 26-28.

The meeting again will be held concurrently with the Annual Meeting of the State Medical Association. Mrs. Payne was installed in June as the new President of the American Medical Association Auxiliary.

Also addressing the Auxiliary will be Mrs. Keith D. Jones of Warrensburg, Missouri, President of the Southern Medical Association Auxiliary.

More than 200 spouses of physicians are expected to attend the Auxiliary's business sessions, over which Mrs. Logan W. Hovis of Vienna, the Auxiliary's President, will preside.

An invitation has been extended to all Auxiliary members to attend the first session of the State Medical Association's House of Delegates on Thursday, August 26, at 2:30 P. M. in Chesapeake Hall. Dr. William Y. Rial, AMA President, will be the principal speaker. Auxiliary members also are invited to attend formal opening ceremonies of the Association's 115th Annual Meeting at 9 A. M. on Friday, August 27, in the theater. Dr. Edward N. Brandt, Jr., Assistant U. S. Secretary for Health in the Department of Health and Human Services in Washington, will deliver the keynote Thomas L. Harris address.

Mrs. Logan W. Hovis

Mrs. Torrence P. B. Payne

Mrs. Keith D. Jones

The keynote address by Mrs. Payne will highlight the initial Auxiliary session at 9:30 A. M. on Friday. Dr. John B. Markey of Charleston, President of the State Medical Association, will be recognized for brief remarks.

Mrs. Jones will make her address during the second general session Saturday morning. During this session also, Mrs. Payne will install Mrs. Richard S. Kerr of Morgantown as President, and other new officers, and Mrs. Kerr will deliver her inaugural address.

For other scheduled business and sports activities, see the official Auxiliary program in this issue of *The Journal.*

Sports Events Again Planned For Annual Meeting

Physicians and auxiliary members might find time a problem, but they plan to work annual golf and tennis competition into the tight business and scientific program schedule for the State Medical Association's Annual Meeting at the Greenbrier August 26-28.

Dr. Joseph T. Mallamo of Fairmont, who had an 18-hole low gross score of 78 last year, is the defending champion in the Medical Golf Tournament. Mrs. John B. Markey of Charleston won the 1981 women's competition.

Winners of last year's men's doubles tennis competition were Drs. Prospero B. Gogo of Beckley and Francisco D. Sabado, Jr., of Martinsburg. In women's play, Mrs. William J. Echols of Huntington and Mrs. A. Robert Davies of Troy, Ohio, made up the winning team.

WVU Knee Course To Include International Faculty

An international faculty will conduct a course on "Current Controversies in Total Knee Replacement" September 30-October 1 in Morgantown.

The meeting site will be the Lakeview Inn and Country Club, and the sponsors are the Department of Orthopedic Surgery and the Office of Continuing Medical Education at the West Virginia University School of Medicine.

Faculty members will be:

Eric L. Radin, M. D., WVU Professor and Chairman, Department of Orthopedic Surgery, and J. David Blaha, M. D., WVU Assistant Professor of Orthopedics and Chief, Section of Arthritis Surgery, Department of Orthopedic Surgery, Program Coordinators;

Richard S. Bryan, M. D., Professor of Orthopedic Surgery, Mayo Clinic, Mayo Medical School; M. A. R. Freeman, M. D., Consultant Orthopedic Surgeon, London (England) Hospital; John N. Insall, M. D., Professor of Orthopedic Surgery, Cornell University Medical School Hospital for Special Surgery, New York City; Larry S. Matthews, M. D., Professor of Surgery, Section of Orthopedic Surgery, University of Michigan;

Igor Paul, Ph.D., Associate Professor of Mechanical Engineering, Massachusetts Institute of Technology; Clement B. Sledge, M. D., Professor and Chairman, Department of Orthopedic Surgery, Brigham and Women's Hospital, Boston; and Jacques Wagner, M. D., Professor and Chief, Orthopedic Service, Brugmann Hospital, Free University of Brussels (Belgium).

The course has been approved for 13 and one-half hours of Category 1 credit toward the Physician's Recognition Award of the American Medical Association.

The registration fee will be $200.

For registration and other information, contact Doctor Radin or Doctor Blaha, (304) 293-3908, or the Office of Continuing Medical Education, (304) 293-3937.

Review A Book

The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal*, Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication.

Physician's Handbook, 20th Edition, by Marcus A. Krupp, M. D.; Lawrence M. Tierney, Jr., M. D.; Ernest Jawetz, M. D., Ph.D.; Robert L. Roe, M. D.; and Carlos A. Camargo, M. D. 774 pages. Price $12. Lange Medical Publications, Los Altos, California 94022. 1982.

Current Pediatric Diagnosis & Treatment, 7th Edition, by C. Henry Kempe, M. D.; Henry K. Silver, M. D., and Donough O'Brien, M. D. 1,106 pages. Price $26. Lange Medical Publications, Los Altos, California 94022. 1982.

Review of Medical Microbiology, 15th Edition, by Ernest Jawetz, M. D., Ph.D.; Joseph L. Melnick, Ph.D.; and Edward A. Adelberg, Ph.D. 553 pages. Price $17. Lange Medical Publications, Los Altos, California 94022. 1982.

Conference on Public Health New Meeting Feature

This year's program for the Medical Association's Annual Meeting will feature a "new wrinkle"—an informal public health-local health officer conference set for 1 P. M. on Thursday, August 26, in the Jackson Room at the Greenbrier.

The meeting is designed to provide an opportunity for some unstructured dialogue involving those actually working in, or interested in, public health at the community level and various representatives of the West Virginia Department of Health.

L. Clark Hansbarger, M. D., the state's Health Director, sees the program as an additional means of obtaining grass-roots and other input, ideas, observations, recommendations, etc., with regard to public health policies and efforts in West Virginia.

Families Under Stress Symposium Focus

A one-day symposium, "Families Under Stress: Psycho-Social Dimensions and Strategies for Management," will be sponsored by the Department of Social Work of The Johns Hopkins Hospital, Baltimore, Maryland, on September 15.

Some of the lectures will deal with the present realities and future needs of families, the roles of professionals in helping families cope with stress, and enhancing the interaction among family members.

Charleston WVU-CAMC Doctors Honored

A number of physicians at Charleston Area Medical Center and Charleston Division, West Virginia University Medical Center, recently were given special recognition during an Awards Night program.

Presiding at the affair, held in the WVU Charleston Division Auditorium, was Dr. William O. McMillan, Jr., Director of Medical Education, CAMC.

James P. Boland, M. D., Professor of Surgery, received both the Medical Education and Clinician of the Year Award—the former, from the CAMC resident staff, and the latter, from the 1982 medical student class, WVU Charleston Division.

James G. Peden, Jr., recent President of the CAMC House Staff Council, was the recipient of the House Staff Award from his fellow residents.

The Vincent von Kern Award for teaching excellence in surgery went to Kenneth G. MacDonald, Sr., M. D., and Dr. Ellen Szego was the recipient of the Department of Pediatrics Attending of the Year Award. Both were given by the respective residents staffs.

Six CAMC residents received Dean's Prizes from Dean Thomas W. Mou, M. D., and Mr. Edward H. Maier. The prizes were funded by the Sarah and Pauline Maier Scholarship Foundation. The recipients were Drs. Lawrence S. Gross, behavioral medicine; Raymond O. Rushden, surgery; Thomas D. Rapp, family practice; Joan M. Phillips, pediatrics; David W. Thomas, obstetrics and gynecology, and James G. Peden, medicine.

Prizes for residents from Research Day held carlier last spring also were announced. The winners were: First Prize, Glenn Crotty, Jr., M. D., internal medicine, doing a fellowship in endocrinology; Second Prize, Linda G. Schneider, M. D., family practice; and Third Prize, Thomas D. Rapp, M. D., family practice. The winner in the student category was Ronald Gross.

Legal Abortion Risk Drops

Deaths following legal abortion have fallen sharply since 1975 in contrast to maternal deaths during the nine months of pregnancy, which have declined at a slower pace, according to an analysis reported recently by the Centers for Disease Control (CDC).

Medical Meetings

Aug. 26-28—115th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Aug. 30-Sept. 2—Am. Hospital Assn., Atlanta.

Sept. 9-11—Peripheral Vascular Disease Symposium (Saint Anthony Hospital), Columbus, OH.

Sept. 17-18—WV Chapter, Am. College of Surgeons, Morgantown.

Sept. 20-23—Am. College of Radiol., Boston.

Sept. 23 — Infectious Disease Day (Wheeling Area CME Program—Ohio Valley Medical Center, Wheeling Hospital), Wheeling.

Sept. 25-26—Asthma 1980s (St. Charles Hospital, Oregon, OH, & Milton S. Hershey Med. Center, PA State U.), Hershey, PA.

Sept. 25-Oct. 1—Am. College of Emergency Physicians, San Francisco.

Sept. 29-Oct. 2—Am. Neurological Assn., Washington, D. C.

Sept. 30 - Oct. 2 — Women's Health Conference (WVU), Morgantown.

Sept. 30-Oct. 3—ASIM, Chicago.

Oct. 4-7—AAFP, San Francisco.

Oct. 15-17—Med. Society of the District of Columbia, White Sulphur Springs.

Oct. 22-24—PA Med. Society, Philadelphia.

Oct. 23-28—Am. Academy of Pediatrics, New York City.

Oct. 24-29—Am. College of Surgeons, Chicago.

Oct. 24-30—Am. College of Gastroenterology, New York City.

Oct. 30-Nov. 2—Southern Med. Assn., Atlanta.

Nov. 7-10—National Hospice Organization, Washington, D. C.

Nov. 10-14—Med. Society of VA, Williamsburg.

Nov. 18—Diabetes Update (Wheeling Hospital, Ohio Valley Medical Center), Wheeling.

Dec. 5-8 — Interim Meeting, AMA House, Miami Beach.

1983

Jan. 21-23—16th Mid-Winter Clinical Conference, Charleston.

April 15-17—WV Chapter, AAFP, Morgantown.

CONVENTION PROGRAM

115th ANNUAL MEETING

of the

West Virginia State Medical Association

THE GREENBRIER, WHITE SULPHUR SPRINGS

August 26-28, 1982

THURSDAY MORNING
August 26
(Eastern Daylight Time)

9:00-5:00—Registration, Registration Lobby.

9:30—Pre-Convention Meeting of the Council. L. Walter Fix, M.D., *Presiding* (West Virginia Room, with Luncheon in Tyler Room).

THURSDAY AFTERNOON

1:00—Public Health-Local Health Officer Conference (Jackson Room).

2:30—First Session of the House of Delegates. John B. Markey, M.D., *Presiding* (Chesapeake Hall).

Invocation—Joe N. Jarrett, M.D.

Address: William Y. Rial, M.D., President, American Medical Association.

Recognition of AMA-ERF Grants to the West Virginia University and Marshall University Schools of Medicine.

Business Meeting.

5:00—Resolutions Committee. John J. Mahood, M.D., *Presiding* (Directors' Room).

FRIDAY MORNING
August 27

8:30-5:00—Registration, Registration Lobby.

Breakfast Meetings

7:30—Section on Internal Medicine. Maurice A. Mufson, M.D., *Presiding* (Tyler Room).

Guest Speaker: Lee P. Van Voris, M.D., Assistant Professor, Marshall University School of Medicine, Huntington. Subject: "Diagnosis of Viral Diseases Made Easy—Tips for the Practitioner."

7:30—Section on Dermatology. William A. Welton, M.D., *Presiding* (Directors' Room).

Case Presentations.

7:30—Section on Surgery. Robert J. Reed III, M.D., *Presiding* (Pierce Room).

Guest Speaker: Alvin L. Watne, M.D., Professor and Chairman of Surgery, West Virginia University School of Medicine, Morgantown. Subject: "Update on Breast Cancer."

Opening Exercises
(Theater)

9:00—Call to Order—John B. Markey, M.D., President, West Virginia State Medical Association.

Invocation—Joseph T. Skaggs, M.D.

Address of Welcome—John B. Markey, M.D.

Introduction of Carl J. Roncaglione, M.D., 1982 Program Committee Chairman, and other Members of his Committee.

"The Thomas L. Harris Address."

Edward N. Brandt, Jr., M.D., Ph.D., Assistant Secretary for Health, U. S. Department of Health and Human Services, Washington, DC.

First General Session
9:45-12:30

"Symposium on Common Disorders of the Eye, Ear and Mouth"

Theodore P. Werblin, M.D., Ph.D., Bluefield
Moderator and Discussant

9:45—Larry Schwab, M.D., Assistant Professor, Department of Ophthalmology, West Virginia University School of Medicine, Morgantown. Subject: "Medical Therapy of Glaucoma."

10:15—Malcolm D. Graham, M.D., Professor and Vice Chairman, Department of Otorinolaryngology, University of Michigan, Ann Arbor. Subject: "Dizziness: Current Thoughts on Diagnosis and Management."

10:45—Coffee Break to Visit Exhibits.

11:00—J. E. Bouquot, D.D.S., M.S.D., Chairman, Department of Oral Pathology, West Virginia University School of Dentistry, Morgantown. Subject: "The Elusive Oral Pre-Cancer."

11:30—Doctor Werblin, Director, General Research, The Blaydes Foundation, Bluefield, and Clinical Assistant Professor, Ophthalmology, at the University of North Carolina, West Virginia University and Louisiana State University. Subject: "Abnormalities in Visual Acuity and Their Treatment."

12:00 Noon—Questions, Answers and Discussion.

12:30—Recess for Lunch.

FRIDAY AFTERNOON

12:30—Luncheon Honoring Past Presidents of the West Virginia State Medical Association. L. Walter Fix, M.D., *Presiding* (Tyler Room).

12:30—Cancer Committee. Business Meeting. Alvin L. Watne, M.D., *Presiding* (Jackson Room).

12:30—West Virginia Medical Institute, Inc., Board of Trustees Meeting. Harry S. Weeks, Jr., M.D., *Presiding* (Virginia Room).

1:00—West Virginia Chapter, American College of Emergency Physicians. E. B. Santos, M.D., *Presiding* (Pierce Room).

Tara C. Sharma, M.D., Clinical Assistant Professor of Surgery and Pediatrics, Marshall University, School of Medicine, and Chief of Urology, Cabell Huntington Hospital, Huntington. Subject: "Urological Emergencies."

Lewis Clayman, D.M.D., M.D., Assistant Professor of Surgery, Marshall University, School of Medicine, Huntington. Subject: "Maxillofacial Injuries."

2:00—West Virginia Chapter, American Academy of Pediatrics. Herbert H. Pomerance, M.D., *Presiding* (Fillmore Room).

Guest Speaker: Malcolm D. Graham, M.D. Subject: "Otitis Media—An Update."

2:00—Section on Orthopedic Surgery. Larry Jack Stemple, M.D., *Presiding* (West Virginia Room).

Guest Speaker: James R. Andrews, M.D. Subject: "Advancement in Ligament Reconstruction of the Knee."

2:00—West Virginia District Branch, American Psychiatric Association. James M. Stevenson, M.D., *Presiding* (Lee Room).

Guest Speakers: Thomas A. Haymond, M.D., Reedsville. Subject: "The Physician Looks at his Own Alcohol Recovery."

Tom H. Pepper, M.D., Associate Professor of Behavioral Medicine, West Virginia University, Morgantown. Subject: "Psychiatry and the Alcoholic."

Stanley E. Gitlow, M.D., Clinical Professor of Medicine, Mount Sinai School of Medicine, New York City. Subject: "Alcoholism: A Disease of Brain Disfunction."

5:00—Committee on Nominations. Robert D. Hess, M.D., *Presiding* (Washington Room).

FRIDAY EVENING

6:00—Cocktail Party. The University of Virginia Medical School Foundation. William C Morgan, M.D., *host* (Old White Club).

6:00—Cocktail Party. West Virginia Chapter, Medical College of Virginia Alumni Association. L. Clark Hansbarger, M.D., *in charge* (Old White Club).

6:30—Les Batards Reception. L. Walter Fix, M.D., *in charge* (Virginia Room).

6:30—Cocktail Party. West Virginia University Alumni Association. Robert H. Waldman, M.D., *in charge* (Spring Room).

9:30—Auxiliary "Monte Carlo Night," Cabell County, Host Auxiliary. Mrs. Charles E. Turner, *Chairman* (Chesapeake Hall).

SATURDAY MORNING

August 28

9:00-2:00—Registration, Registration Lobby.

Breakfast Meetings

8:00—Section on Urology. Stanley J. Kandzari, M.D., *Presiding* (Jackson Room).

Guest Speaker: Henry A. Wise II, M.D. Subject: "Urological Anatomy and Its Application to Surgery."

8:00—West Virginia Gastrointestinal Society. Catalino B. Mendoza, Jr., M.D., *Presiding* (Directors' Room).

Guest Speakers: Cordell de la Pena, M.D., Clarksburg, Associate Clinical Professor in Pathology, West Virginia University. Subject: "Histopathology of Endoscopic Biopsy, Esophagus and Stomach."

Ronald D. Gaskins, M.D., Associate Professor of Medicine and Chief, Gastroenterology Section, West Virginia University. Subject: "Newer Physiologic Approaches to Peptic Ulcer Therapy."

8:00—West Virginia Radiological Society. John W. Kennard, M.D., *Presiding* (Lee Room).

Second General Session (Theater) 9:15-12:15

Moderator: David Z. Morgan, M.D.

9:15—D. Verne McConnell, M.D., Plastic and Reconstructive Surgery, Wheeling, and Clinical Professor of Surgery, West Virginia University. Subject: "Contemporary Plastic Surgery."

9:55—Henry A. Wise II, M.D., Director and Associate Professor, Division of Urology, Ohio State University, Columbus. Subject: "Recent Advances in Urology."

10:35—Coffee Break to Visit Exhibits.

10:50—James R. Andrews, M.D., Hughston Orthopedic Clinic, Columbus, Georgia, and Associate Clinical Professor, Tulane University School of Medicine, Department of Orthopedics, Division of Sports Medicine, New Orleans. Subject: "Recent Advancement in Arthroscopic Surgery."

11:30—Ralph O. Dunker, Jr., M.D., Associate Professor of Neurosurgery, West Virginia University. Subject: "The Diagnostic Revolution in Neurosurgery."

12:15—Recess for Lunch.

SATURDAY AFTERNOON

12:00—Publication Committee. Stephen D. Ward, M.D., *Presiding* (Jackson Room).

12:00—West Virginia State Society of Anesthesiologists. John F. I. Zeedick, M.D., *Presiding* (Directors' Room).

Guest Speaker: D. Verne McConnell, M.D. Subject: "Metabolic Changes in Plastic Surgery Patients."

3:00—Second and Final Session of the House of Delegates. John B. Markey, M.D., *Presiding* (Chesapeake Hall).

Invocation—Robert D. Hess, M.D.

Presidential Address: John B. Markey, M.D.

Presentation of New Officers of Auxiliary to the West Virginia State Medical Association.

Presentation of Honor Guests.

Business Meeting.

Election of Officers.

Installation of Harry Shannon, M.D., Parkersburg, as President of the West Virginia State Medical Association.

SATURDAY EVENING

6:30-7:30—Cocktail Party and Reception Honoring Officers of the West Virginia State Medical Association (Colonial Hall Terrace).

A WORD OF THANKS

The 1982 Program Committee, and the officers and members of the West Virginia State Medical Association, wish to acknowledge with sincere thanks grants received from the following firms to help support the Scientific Program for this year's 115th Annual Meeting.

ABBOTT LABORATORIES
North Chicago, Illinois

CIBA PHARMACEUTICAL COMPANY
Madison, New Jersey

HOECHST-ROUSSEL PHARMACEUTICALS, INC.
Somerville, New Jersey

HOSPITAL & PHYSICIANS SUPPLY COMPANY
Charleston, West Virginia

ELI LILLY AND COMPANY
and DISTA PRODUCTS COMPANY
Indianapolis, Indiana

ROXANE LABORATORIES, INC.
Columbus, Ohio

THE PURDUE FREDERICK COMPANY
Norwalk, Connecticut

A. H. ROBINS COMPANY
Richmond, Virginia

WILLIAM H. RORER, INC.
Fort Washington, Pennsylvania

SANDOZ PHARMACEUTICALS
East Hanover, New Jersey

SEARLE LABORATORIES
Chicago, Illinois

SMITH KLINE & FRENCH LABORATORIES
Philadelphia, Pennsylvania

THE UPJOHN COMPANY
Kalamazoo, Michigan

(The firms listed above are those which had allocated funds to the Scientific Program as this issue of the *The Journal* went to press. Additional contributors will be listed in the Official Program to be distributed at the Greenbrier.)

DELEGATES AND ALTERNATES

BOONE (2)—Delegates, Robert B. Atkins and Sriramloo Kesari, Madison. Alternates, Manuel T. Uy and Gary F. Steele, Madison.

BROOKE (2)—Delegates, W. T. Booher, Jr., Wellsburg; and Ralph McGraw, Follansbee. Alternates, Rogelio L. Velarde and Leticia Peralta-Velarde, Follansbee.

CABELL (13)—Delegates, Maurice A. Mufson, Robert W. Lowe, Albert C. Esposito and Thomas F. Scott, Huntington; H. S. Mullens, Kenova; Jack Leckie, Lee P. Van Voris, Estelito B. Santos, Hossein Sakhai, Kenneth Scher, Robert W. Coon, Florence K. Hoback and Robert R. Dennison, Jr., Huntington. Alternates, Tara Sharma, Huntington; W. W. Mills, Kenova; Lewis Clayman, Kirk J. David, Thomas G. Folsom, Donald S. Robinson, Joseph E. Ricketts, John D. Harrah, Lorraine J. Rubis, Eduardo A. Rivas-Pardo, Ray M. Kessel, Talmadge R. Huston and Gary G. Gilbert, Huntington.

CENTRAL WEST VIRGINIA (4) — Delegates, Joseph B. Reed, Buckhannon; C. R. Davisson and Luis A. Almase, Weston; and George T. Hoylman, Gassaway. Alternates, Clemente Diaz, Richwood; and Alfred J. Magee, Summersville.

EASTERN PANHANDLE (5)—Delegates, John S. Palkot, Francisco D. Sabado, Jr., Leo H. T. Bernstein, H. Alexander Wanger and Robert S. Strauch, Martinsburg. Alternates, Jean P. Lucas and Richard R. McCune, Martinsburg.

FAYETTE (3)—Delegates, Amor H. Ramirez, Montgomery; Honorato M. Aguila and Joe N. Jarrett, Oak Hill.

GREENBRIER VALLEY (4)—Delegates, Stephen L. Sebert, Fairlea; Lee B. Todd, Quinwood; Robert K. Scott II and Robert K. Modlin, Ronceverte.

HANCOCK (4)—Delegates, Pedro R. Montero, Jr., Chester; Timothy A. Brown, Antonio S. Licata and Thomas J. Beynon, Weirton.

HARRISON (6)—Delegates, Gaspar Z. Barcinas, Bridgeport; L. Dale Simmons, Clarksburg; M. V. Kalaycioglu, Shinnston; Carlos A. Naranjo, Cordell A. de la Pena and Catalino B. Mendoza, Jr., Clarksburg. Alternates, John A. Bellotte, Clarksburg; F. A. Spencer, Jr., Salem; James E. Bland and Robert D. Hess, Clarksburg; Sidney B. Jackson and James L. Bryant, Clarksburg.

JEFFERSON (2) — Delegates, William Smith Miller, Ranson; and L. Mildred Williams, Charles Town.

KANAWHA (21)—Delegates, Adla Adi and Alberto G. Capinpin, Charleston; W. Alva Deardorff, South Charleston; Donald E. Farmer, Robert L. Ghiz, George V. Hamrick and Sherman E. Hatfield, Charleston; George W. Hogshead, Nitro; James W. Lane, Kenneth G. MacDonald, Sr., Jimmy L. Mangus, Eric P. Mantz, John B. Markey, William C Morgan, Jr., and Pejawar M. Rao, Charleston; Richard C. Rashid, South Charleston; William C. Revercomb, Jr., Charleston; Carl J. Roncaglione, South Charleston; G. A. Shawkey, Joseph T. Skaggs and John F. I. Zeedick, Charleston.

Alternates, William H. Carter, Charleston; William D. Crigger, South Charleston; Jerry W. Edens, Elkview; Carl B. Hall, Echols A. Hansbarger, Jr., Charleston; Ralph J. Holloway, South Charleston; Fred F. Holt, Charleston, Edward Jackson, St. Albans; Thomas J. Janicki, Alberto C. Lee, Rogelio T. Lim, Tony C. Majestro, William O. McMillan, Jr., Lionel J. Nair, Warren Point, William G. Sale, Richard H. Sibley, Charleston; Joseph A. Smith, Dunbar; George E. Toma, Alfredo C. Velasquez and Ronald L. Wilkinson, Charelston.

LOGAN (4)—Delegates, Herbert D. Stern and Carlos F. DeLara, Logan; Thomas P. Long, Man; and Chanchai Tivitmahaisoon, Logan. Alternates, Parkob Srichai, Man; Maria Luna Tan Navarro, Mark S. Spurlock and Robert K. Scott, Logan.

MARION (5)—Delegates, Babu R. Devabhakthuni and Joseph T. Mallamo, Fairmont.

MARSHALL (3)—Delegates, Carlos C. Jimenez, Jose J. Ventosa, Jr., and Kenneth J. Allen, Glen Dale. Alternates, Ignacio Luna, Jr., Michail Dolgovskij and Manuel A. Villaverde, Glen Dale.

MASON (2)—Delegates, Aarom Boonsue.

McDOWELL (3) — Delegates, Muthusami Kuppusami, Welch; Richard O. Gale, Gary; and Arthur Allen Carr, Welch. Alternates, Freeman L. Johnston, Ray E. Burger and Bernard M. Swope, Welch.

MERCER (7)—Delegates, David F. Bell, Jr., and J. E. Blaydes, Jr., Bluefield; Darrell C. Belcher, Princeton; T. Keith Edwards, Bluefield; Frank J. Holroyd, Princeton; John J. Mahood, Bluefield; and Ernest R. Poral, Princeton.

MINGO (3)—Delegates, Edward B. Headley, Delbarton; and Diane E. Shafer, Williamson.

MONONGALIA (15)—Delegates, Donald Clayton Carter, George A. Curry, John F. Foss, Ronald D. Gaskins, Paul J. Jakubec, John Evans Jones, Stanley J. Kandzari, Roger E. King, Hugh A. Lindsay, David Z. Morgan, Phillip John Murray, William Albert Neal, Ralph W. Ryan, Wilbur Z. Sine and Robert H. Waldman, Morgantown. Alternates, Stephen R. Amato, J. David Blaha, Ludwig Gutman, Eric T. Jones, Roland L. Kennedy, Richard B. Knapp, James Dougles Martin, Richard John Pearson, Justus C. Pickett, Vadrevu K. Raju, James M. Stevenson, Thomas J. Tarnay, Herbert E. Warden, Roland J. Weisser, Jr., and Bernard Zimmermann, Morgantown.

OHIO (10)—Delegates, George E. Bontos, Robert S. Robbins, James C. Durig, D. L. Latos, Milton E. Nugent, Robert J. Reed III, M. D. Reiter, Stephen D. Ward, Harry S. Weeks, Jr., and D. Verne McConnell, Wheeling.

PARKERSBURG ACADEMY (8) — Delegates, Michael A. Morehead and William E. Gilmore, Parkersburg; Logan W. Hovis, Vienna; and Michael J. Lewis, St. Marys.

POTOMAC VALLEY (3) — Delegates, Zinnia Bacol-Giron and Nabal B. Giron, Romney. Alternates, Robert E. Gladsden, Keyser; R. R. Brown, Romney; and James C. Bosley, Keyser.

PRESTON (2)—Delegates, Thomas A. Haymond, Reedsville; and Del Roy R. Davis, Kingwood. Alternates, William H. Harriman, Terra Alta; and John W. Trenton, Kingwood.

RALEIGH (7)—Delegates, Richard D. Richmond, Jose L. Oyco, Norman Wayne Taylor, William D. McLean, Worthy W. McKinney, M. Jamil Ahmed and Warren D. Elliott, Beckley. Alternates, Richard M. Thompson, Edward T. Liu, James A. Barnes, Prospero B. Gogo, Joseph A. Maiolo, and Nicholas D. Zambos.

SUMMERS (2)—Delegates, Chandra P. Sharma and Jack D. Woodrum, Hinton. Alternates, T. H. Mirza and Saryu P. Dani, Hinton.

TYGART'S VALLEY (6) — Delegates, Hugh H. Cook, Jr., and K. J. Myers, Jr., Philippi; Gene W. Harlow and Michael M. Stump, Elkins; Jerome C. Arnett, Jr., Elkins; and Christopher Z. Villarava, Grafton.

WESTERN MEDICAL SOCIETY OF WV (3)—Delegates, James T. Hughes and Ali H. Morad, Ripley.

WETZEL (2)—Delegates, K. M. Chengappa and Donald A. Blum, New Martinsville.

WYOMING (2)—Delegates, Ross E. Newman and Frank J. Zsoldos, Mullens. Alternate, George F. Fordham, Mullens.

Reception Committee

Frank J. Holroyd
Harry S. Weeks, Jr.
John B. Markey
Harry Shannon
Worthy W. McKinney
James R. Cook
Sherman E. Hatfield

John A. Belis
Robert R. Rector
James C. Durig
Carl J. Roncaglione
Arthur A. Abplanalp
D. L. Latos
James T. Hughes

David B. Gray
William C Morgan
Michael J. Lewis
Moseley H. Winkler
C. R. Davisson
Jacques Charbonniez
Ali A. Garmestani

Robert D. Hess
Joseph A. Smith
William E. Gilmore
Carl R. Adkins
Stephen D. Ward
John A. Mathias
George W. Hogshead

J. C. Huffman
L. Walter Fix
George A. Curry
L. Dale Simmons
Jack Leckie
Thomas F. Scott
John J. Mahood
T. Keith Edwards

Official Program

AUXILIARY

to the

West Virginia State Medical Association

58th Annual Meeting

THE GREENBRIER

White Sulphur Springs

August 26-28, 1982

THURSDAY AFTERNOON

August 26

2:30-5:00—Registration, Lower Lobby.

2:30—First Session of the House of Delegates, West Virginia State Medical Association (Chesapeake Hall).

Address by William Y. Rial, M. D., President, American Medical Association.

Recognition of AMA-ERF Grants to the West Virginia University and Marshall University Schools of Medicine.

4:00—Pre-Convention Board Meeting, Mrs. Logan W. Hovis, President, presiding (Fillmore-Van Buren Rooms).

FRIDAY MORNING

August 27

9:00-4:00—Registration, Lower Lobby.

8:00—Past Presidents' Breakfast, Mrs. Gary G. Gilbert, Immediate Past President, presiding (Virginia Room).

9:30—Formal Opening of the Convention, Mrs. Logan W. Hovis, President, presiding (Fillmore-Van Buren Rooms).

Invocation, Pledge of Loyalty and Pledge to Flag.

In Memoriam—Mrs. G. A. Shawkey.

Introduction of Honored Guests.

Presentation of John B. Markey, M. D., President, West Virginia State Medical Association.

Introduction of Convention Chairman — Mrs. J. L. Mangus.

Roll Call of Delegates — Mrs. Charles C. Weise, Recording Secretary.

Declaration of a Quorum—Mrs. J. L. Mangus, Parliamentarian.

Keynote Address — Mrs. Torrence P. B. Payne, President, American Medical Association Auxiliary.

Credentials and Registration—Mrs. Wilson P. Smith.

Convention Rules of Order—Mrs. J. L. Mangus, Parliamentarian.

Report of the 1981 Convention Reading Committee—Mrs. Thomas J. Janicki.

Treasurer's Report—Mrs. T. Keith Edwards.

Recommendations from Pre - Convention Board Meeting—Mrs. Logan W. Hovis.

New Business.

Report of the 1982 Nominating Committee, First Reading—Mrs. Gary G. Gilbert.

Election of the 1983 Nominating Committee.

Reports of Officers and Standing Committee Chairmen (These will not be read, but are published in the Annual Reports Book).

Presentation of Regional Directors:

Eastern Region—Mrs. Harvey D. Reisenweber.

Northern Region—Mrs. A. S. Licata.

Western Region—Mrs. William M. Jennings.

Southern Region—Mrs. Owen C. Meadows, Jr.

Central Region—Mrs. Robert E. Sams.

Announcements.

Recess.

FRIDAY AFTERNOON

Bridge (Trellis Lobby). Eastern Panhandle, Host Auxiliary. Mrs. Harvey D. Reisenweber, Chairman.

Golf. Kanawha County, Host Auxiliary. Mrs. John B. Markey, Chairman.

Tennis. Cabell County, Host Auxiliary. Mrs. William J. Echols, Chairman.

(Times to be announced).

FRIDAY EVENING

9:30—Monte Carlo Night, Chesapeake Hall. Cabell County, Host Auxiliary. Mrs. Charles E. Turner, Chairman. (Tickets may be purchased at the registration desk).

SATURDAY MORNING

August 28

9:00-10:00—Registration, Lower Lobby.

9:00—Second General Session, Mrs. Logan W. Hovis, President, presiding (Fillmore-Van Buren Rooms).

Introduction of Honored Guests.

Roll Call of Delegates—Mrs. Charles C. Weise.

Declaration of a Quorum—Mrs. J. L. Mangus.

Address—Mrs. Keith D. Jones, President, Southern Medical Association Auxiliary.

Convention Announcements — Mrs. J. L. Mangus.

Credentials and Registration—Mrs. Wilson P. Smith.

Presentation of AMA-ERF Awards—Mrs. Robert S. Robbins and Mrs. John W. Kennard, Co-Chairmen. Recognition of AMA-ERF Grants to the West Virginia University and Marshall University Schools of Medicine.

Unfinished Business.

Report of the 1982 Nominating Committee, Second Reading—Mrs. Gary G. Gilbert.

Election of Officers.

Installation of Officers—Mrs. Torrence P. B. Payne, President, American Medical Association Auxiliary.

Presentation of President's Pin and Gavel, Mrs. Logan W. Hovis.

Presentation of Past President's Pin, Mrs. Gary G. Gilbert.

Inaugural Address—Mrs. Richard S. Kerr.

Announcements.

Adjournment.

11:00—Post-Convention Board Meeting—Mrs. Richard S. Kerr, President, presiding (Fillmore-Van Buren Rooms).

SATURDAY AFTERNOON

3:00—Second and Final Session of the House of Delegates, West Virginia State Medical Association (Chesapeake Hall).

Presidential Address: John B. Markey, M. D.

Installation of Harry L. Shannon, M. D., Parkersburg, as 1982-83 President of the West Virginia State Medical Association.

(Auxiliary members are invited and urged to attend).

SATURDAY EVENING

6:30-7:30—Cocktail Party and Reception Honoring the Officers of the West Virginia State Medical Association and its Auxiliary (Colonial Hall Terrace).

SCIENTIFIC EXHIBITS

DEPARTMENT OF COMMUNITY MEDICINE, WEST VIRGINIA UNIVERSITY MEDICAL CENTER

I. "HIGH - RISK PREGNANCY IDENTIFICATION." The West Virginia Department of Health has begun a program to separate pregnant women attending for care into low-risk and high-risk categories. The low-risk ones can be followed in the clinics, but high-risk ones are referred. Certain counties have begun the program, and others will follow. The screening forms useful for identification of high risk will be demonstrated.

II. "USING THE BIRTH CERTIFICATE TO IDENTIFY HIGH-RISK INFANTS." The West Virginia Department of Health and WVU are collaborating on a project to identify items on the birth certificate that predict probable problems for the newborn, and to achieve follow-up with these families. Conditions where predictive items may be found include: postneonatal death, SIDS, child abuse and neglect, hearing disability, and cerebral palsy. These items will be listed and the references cited.

III. "CARE FOR THE RHESUS NEGATIVE MOTHER." A study was conducted in the summer of 1981 by medical student Tim Lesaca. He sent questionnaires to obstetricians and family practitioners who deliver babies to find out which management regimen was preferred at different stages in pregnancy and after delivery. Findings have been analyzed and will be presented. The regimens recommended at WVU will be presented.

IV. "HOSPICE SERVICES IN WEST VIRGINIA." More than 200 hospice programs are in action in the United States, and there are four active programs in West Virginia (Wheeling, Charleston, Huntington and Martinsburg). Six programs are being developed in the state. There are a wide variety of operational models for hospices, and West Virginia has some of them. The services that hospices offer will be described. The reference in West Virginia House Bill 1921, dealing with continuum of care and passed by the 1982 Legislature, to hospice services will be itemized.

R. John C. Pearson, M. D., Professor and Chairman.

DISABILITY DETERMINATION SERVICE, WEST VIRGINIA DIVISION OF VOCATIONAL REHABILITATION

"DOCUMENTATION OF PULMONARY FUNCTION AND OTHER DISABILITIES FOR SOCIAL SECURITY." Kathy Knapp, Pulmonary Function Technician with Dr. Dominic J. Gaziano, Charleston internist, will answer questions and demonstrate the method of obtaining a good effort by patient as necessary for a reproducible spirogram. Also, video tape presentations on Disability Determination Service/Social Security listings by various body systems. Video tape presentations by Doctor Gaziano, Dr. Charles C. Weise, Charleston psychiatrist, and Dr. Lee H. Pratt, Charleston neurologist, will be available for viewing.

Ms. Kathy Knapp, Pulmonary Function Technician, and David H. Cleland, Medical Relations Officer.

WEST VIRGINIA DEPARTMENT OF HEALTH

I. "NEW RULES AND REGULATIONS FOR DISEASE REPORTING." Brief description of the statewide disease-reporting system as mandated by the State Board of Health and in the manner specified by the State Health Director. The exhibit outlines the reporting responsibilities of the state and county health departments and the private sector (physicians, hospitals, primary care clinics, nursing homes, laboratories, schools, institutions, etc.). Available will be copies of the rules and regulations, which include the list of required reportable diseases.

Loretta E. Haddy, State Epidemiologist.

II. "STATE HEALTH EDUCATION CONFERENCE." This display promotes the June, 1983, conference to be held in West Virginia (Charleston) for the first time. The conference coordinator is Dr. William L. Neal of Huntington. The theme will be "Environmental Healthful Living."

Sam Folio, Director, Division of Health Education.

III. "HEALTH STYLES." This is a background display with brochures featuring questions about individual health habits.

Sam Folio, Director, Division of Health Education.

IV. "HYPERTENSION EXHIBIT." This display demonstrates the West Virginia Department of Health's program to combat hypertension.

Sam Folio, Director, Division of Health Education.

V. "RISK FACTOR PREVALENCE: THE WEST VIRGINIA SURVEY." The Department of Health conducted a Risk Factor Prevalence Survey of 476 adults, by telephone, using a random digit dialing technique. The questions focused on: safety, hypertension, smoking, alcohol, exercise, stress and diet. The exhibit will report the results of the survey.

Loretta E. Haddy, State Epidemiologist; Robert Anderson, Coordinator, Division of Health Education, and Sam Folio, Director, Division of Health Education.

MARSHALL UNIVERSITY SCHOOL OF MEDICINE

"COMMUNITY HEALTH PROBLEMS." This is a display of research projects completed by fourth-year students at Marshall University School of Medicine during their six weeks' clerkship in community medicine. Each problem has been "field" researched on site. Subjects for research cover a

wide range of community health concerns with emphasis on rural needs. Most projects are a continuation of the student's second-year community medicine "literature" research papers, which deal with the subject in nation-wide/state-wide comparison. Abstracts of many, and some examples of entire papers will be available. Suggestions or requests for research into specific concerns of a community health nature will be solicited from interested participants. Requests for reprints of papers will be taken.

David J. Heydinger, M. D., Associate Dean for Academic Affairs, and Chairman of the Department of Family and Community Health.

MAXILLOFACIAL PROSTHETICS CLINIC, WEST VIRGINIA UNIVERSITY SCHOOL OF DENTISTRY, DEPARTMENT OF PROSTHODONTICS

"MAXILLOFACIAL PROSTHETICS — REHABILITATION HELP FOR HEAD AND NECK PATIENTS." This display will show the different types of maxillofacial prosthetic treatment that can be provided for patients with oral and facial defects occurring as a result of cancer treatment, trauma or congenital anomalies. Information will be provided about various prostheses such as obturators, mandibular resection prostheses, speech aids, palatal lifts, treatment prostheses, implants, and facial prostheses. There will be a photographic display, samples of prostheses, and a tape/slide presentation to provide more detailed information.

Edwin V. Kluth, D.D.S., M.S., Associate Professor; and Young J. Lee, D.D.S., Assistant Professor.

WEST VIRGINIA MEDICAL INSTITUTE, INC.

"HOSPITAL UTILIZATION PROFILES." The West Virginia Medcial Institute will display examples of utilization patterns by hospital size, week-end and short-stay admissions, physician, and average length of stay. Included will be graphics on typical patterns of questionable utilization. Limited information on individual physician practice patterns will be available. The display will be staffed in order to provide information on WVMI program and contracts.

Betty C. Kirkwood, Executive Director, and Harry S. Weeks, Jr., M. D., Medical Director.

MUTUAL ASSOCIATION FOR PROFESSIONAL SERVICES

"MAPS — PURPOSES AND OBJECTIVES." Mutual Association for Professional Services (MAPS) information concerning various MAPS-researched and sponsored practice management and continuing medical education programs, tax and retirement planning, insurance, and other financial products and services. Also on display will be information describing the benefits of MAPS membership.

Fred L. Kellmeyer, State Director; and George J. Neilan, Representative.

THE MYERS CLINIC — BROADDUS HOSPITAL

"LOW BACK PAIN." This exhibit presents a controversial method of treatment of low back pain—the injection method. It emphasizes that it should not be used in fractures, dislocations, tumors, ruptured intervertebral discs, tuberculosis infections, rheumatoid spondylitis, psychiatric and psychologic illnesses, and osteoarthritis. It is not to be used in the spinal regions above the sacrum.

Hu C. Myers, M. D., Chief of Surgery Emeritus; and J. Richard Crawford, Director of Photography.

SOUTHERN MEDICAL ASSOCIATION

"SOUTHERN MEDICAL ASSOCIATION." The Southern Medical Association will have available information on the benefits of membership, including such CME programs as the Dial Access System, SMA telecourses, the *Southern Medical Journal*, regional postgraduate courses, medical staff leadership conferences, and the annual scientific assembly. Also available will be material on the SMA insurance and retirement programs. Stop by our booth and receive a free gift.

Robert P. Mosca, Director, Member Services; Barbara Bedford, Member Services Coordinator, and William J. Ranieri, Executive Vice President.

UNITED STATES AIR FORCE

"USAF HEALTH PROFESSION OPPORTUNITIES". Representatives will be available to discuss with physicians possible opportunities as commisioned officers within the United States Air Force Medical Corps.

Captain Donald G. Wood, Chief, Health Professions Recruiting; and MSgt Barry W. Floyd, USAF Health Professions Recruiter.

U. S. ARMY MEDICAL DEPARTMENT

"U. S. ARMY MEDICAL DEPARTMENT." Physician Placement Service for the entire U. S. Army Medical Department. We will be providing information about the Health Professions Scholarship Program for medical students; internship/residency/fellowship openings, and the plethora of placement opportunities for physicians in all specialties.

CPT John Kitsopoulos, MAJ Sheila T. Bowman, and MAJ James E. Kuza, AMEDD Personnel Counselors.

WEST VIRGINIA POISON SYSTEM

"WEST VIRGINIA POISON SYSTEM." Death from accidental poisoning is preventable. Yet, in 1980, West Virginia reported 50 children who died as a result of poisoning. The West Virginia Poison System is available 24 hours a day to provide poison information and treatment to health professionals and the general public throughout the state.

Kathy Sensabaugh, Director; Mary Ann Capito, Supervisor, and Terri DeFazio, Poison Specialist.

WEST VIRGINIA UNIVERSITY SCHOOL OF MEDICINE, OFFICE OF CONTINUING MEDICAL EDUCATION

I. "CONTINUING MEDICAL EDUCATION AT WEST VIRGINIA UNIVERSITY SCHOOL OF MEDICINE." Information and materials describing continuing medical education programs scheduled for the fall 1982 season will be available. The scheduled programs include the Second Annual Football Saturday CME Series, Eighth Annual Hal Wanger Family Practice Conference, the First Annual Ob/Gyn Seminar, and symposia on Sports Medicine, Diagnostic Ultrasound, and Current Controversies in Total Knee Replacement.

II. "CONSULTATION VIA TELEPHONE: A SERVICE TO WEST VIRGINIA PHYSICIANS." Modeled after the Medical Information Service via Telephone (MIST) program at the University of Alabama, the Patient Care Telephone Consultation (PCTC) service enables practicing physicians to request consultations in patient care and management via a toll-free, long-distance line. In addition, consultants are requested to supply the Medical Library with key words pertinent to the consultation for a MED LINE search of the recent medical literature that might assist the physician. During the past three years of operation, the PCTC service has received 603 calls from 192 physicians located in 45 of the state's 55 counties.

Robert L. Smith, M. D., Assistant Dean, Continuing Medical Education, and Robert E. Kristofco, Administrator, Continuing Medical Education.

WEST VIRGINIA WORKMEN'S COMPENSATION FUND AND WEST VIRGINIA DIVISION OF VOCATIONAL REHABILITATION

"REHABILITATION—A JOINT EFFORT." Recognizing a commonality of purpose, the West Virginia Workmen's Compensation Fund and the West Virginia Division of Vocational Rehabilitation entered into a cooperative agreement for a joint program to bring rehabilitation services to the industrially injured. The purpose is to seek out, identify and adopt programs and procedures that will serve effectively the needs of the industrially disabled in an effort to return them to gainful employment whenever possible. Our agencies recognize the importance, and solicit the input, of the medical community, and depend extensively on their continued cooperation in helping us realize this ultimate goal.

Gretchen O. Lewis, Workmen's Compensation Commissioner; Earl W. Wolfe, Director, Division of Vocational Rehabilitation, and John E. Farley, Director, Claims Management Division (WCF).

NATIONWIDE INSURANCE—MEDICARE

"MEDICARE OPERATIONS." Nationwide invites you to stop by and discuss your Medicare problems. Also, a "desk reference" is available to assist your medical assistant with Medicare claims filing.

James A. Cuppy, Field Service Manager; Betty Rickenbacker, West Virginia Field Manager; and James B. Irwin, Ohio Field Manager.

DEPARTMENT OF PEDIATRICS, WEST VIRGINIA UNIVERSITY SCHOOL OF MEDICINE

"WEST VIRGINIA SUDDEN INFANT DEATH SYNDROME (SIDS) INFORMATION AND COUNSELING PROJECT." The West Virginia SIDS Project began in December, 1981. The primary objective is to enhance the existing state management system for SIDS. This includes the training of health professionals in the sensitive handling of SIDS families and providing presentations around the state for general audiences to increase the public awareness regarding SIDS issues. Informational materials and counseling support are being made available to SIDS families, friends and other concerned persons. A consultation service for health professionals and families has been developed. The project staff is available around the clock to provide information and support by telephone.

Kathy L. Hopkins, R.N., M.A., Project Coordinator.

WEST VIRGINIA PHYSICAL THERAPY ASSOCIATION

"PHYSICAL THERAPY: CHANGING CONCEPTS OF CARE." The display is designed to depict the current trends of physical therapy practice. New concepts are developing rapidly in sports medicine, orthopedics, pediatrics and cardiac rehabilitation. The emphasis of the display is to inform physicians of the changing roles and responsibilities of the physical therapy practitioner.

Charles Meacci, Director of Physical Therapy; Tony Minard, Director of Rehabilitative Services, and Lynette C. Wisecup, R.P.T.

SHAWNEE HILLS TREATMENT CENTER

"RECOGNITION AND TREATMENT OF SUBSTANCE ABUSE AND DEPENDENCE DISORDERS." Substance abuse and dependence disorders have major, often fatal, physical and social complications. This exhibit will examine the role of the physician in the early diagnosis and treatment of these disorders.

John Hutton, M. D., Clinical Director; Frederick Donovan, Psy.D., Employee Assistance Coordinator, and Frances Clendenen, M.A., Associate Director of Clinical Services.

ANNUAL REPORTS

Committee on Insurance

We are pleased to report a significant upgrading of several plans during the past year in our Health Insurance Program. In particular, the following changes were made to meet the increasing needs of our membership:

Major Medical Plan

Effective December 1, 1981, a $500,000 Major Medical Plan was installed with four different deductible features ($100, $250, $500, $1,000). The new plan provides benefits for expenses in and out of the hospital. The previous plan provided benefits for expenses incurred only while hospitalized up to a maximum of $30,000. Additionally, employees of members are eligible to participate in the new plan.

Life Insurance Plan

The maximum amount of life insurance available to members was increased from $100,000 to $250,000 on October 1, 1981. At the same time, the cost per $1,000 was significantly reduced. Spouse coverage was doubled from $25,000 to $50,000. For the first time, employees may enroll in the plan up to a maximum of $100,000.

Office Overhead Expense Plan

On February 1, 1982, this plan, like the above two programs, was transferred to Mutual Life Insurance Company of New York (MONY). The average cost of the plan was reduced by approximately 15 per cent. Members can apply for up to $5,000 a month in benefits to help pay office operating costs when they are disabled due to sickness or injury.

In addition to the above improved plans, our members continue to have four more plans designed to meet their needs:

Long-Term Disability Plan

A choice of three different plans providing up to $500 a week when disabled due to sickness or injury is offered. A member may have benefits start on the first day of injury and the eighth day of sickness or select from four different self-insured waiting periods.

Hospital Money Plan

A plan providing up to $100 a day while hospitalized. Spouse and dependent children can be included in the coverage.

Accidental Death and Dismemberment

Starting at $10,000, the plan offers up to $100,000 to members and $50,000 to their spouse with coverage effective on a 24 hour-a-day/365 days-a-year basis. Protection is afforded anywhere in the world and includes travel as a passenger on regular airline schedules.

Professional Liability

The current Medical Association-endorsed Professional Liability Insurance Program is completing the second year of operation. The program is a combination of effort on the part of the Association, Continental Casualty Company and McDonough Caperton Shepherd Group, Inc., to provide a first-rate professional liability program to eligible Association members.

The concept of a Managing General Agent — the role occupied by McDonough — provides common representation for all physicians in the program. This is important for program responsiveness and on-going program evaluation. The program also provides for West Virginia physicians to be important contributors in areas like claim review and loss prevention. The over-all purpose is to provide quality coverage from a financially sound insurance company at an affordable price.

The program has been strengthened this year by adding 193 new physicians. A small number of physicians was not insured because they did not meet the underwriting requirements of CNA. The Association wants the selection process to be fair, but feels strongly that physicians with repeatedly poor loss experience or evidence of improper practices should not be insured in the program. The program must remain financially healthy.

Several accomplishments for the new program need to be reported:

1. Rate reduction of 19 per cent—a significant first compared to recent years.
2. Establishment of a reporting mechanism for claims and suits as reports are made

to the Association every 15 days and represent an essential element for program evaluation.

3. Written procedures have been established for claim and peer review participation in the decision-making proces by physicians.
4. Two formal status reports are provided by the Managing General Agent so that the Association knows status and can decide on program areas to improve.
5. Improved communication lines have been developed between the Association, the Managing General Agent and the CNA Insurance Co.

The Association-endorsed program is growing, and currently is strong. We must be united in our efforts to support the program and work together to improve it. We encourage all members to review the CNA program and see the kind of commitment being made to West Virginia Medicine. There is no area where strength in numbers is more important.

In conclusion, the Committee on Insurance is pleased to report our entire insurance program has been further evaluated and several plans improved significantly to meet the needs of our members. This on-going process of professional administration and support by the membership will continue to assure an excellent program of insurance designed to meet our needs.

Respectfully submitted,
Jack Leckie, M. D., *Chairman*

Committee on Medical Economics

This Subcommittee on Vocational Rehabilitation report will cover a five-year period and will contain the history of the development of a rehabilitation movement of which I think the members of the West Virginia State Medical Association should be aware.

On May 21, the Subcommittee on Vocational Rehabilitation met at the Rehabilitation Center in Institute, West Virginia, with Leslie McCoy, M. D., Vocational Rehabilitation's Assistant Director, Medical Services, and Executive Secretary Charles R. Lewis of the Medical Association. Three significant and far-reaching decisions were made by this group: 1) the Rehabilitation Center at Institute should have a medical director in the field of physical medicine and rehabilitation; 2) a qualified consultant should review and inspect the operation at the Rehabilitation Center, and report both to the subcommittee and the West Virginia Board of Education; and 3) the State Medical Association should initiate steps to document the need for a state physical rehabilitation center outside the auspices of the Division of Vocational Rehabilitation.

The first two suggestions have come about and have resulted in a vast improvement of the operation at the Center. Dr. Prasadarao Mukkamala is now the able Director of the Center, and Dr. Richard D. Burke of Dayton, Ohio, inspected the center and gave an excellent consultation report which resulted in many improvements.

Documentation of Need

The third recommendation was presented to the House of Delegates of the State Medical Association at the annual meeting in August, 1977. The Delegates resolved that the Association, with the help of allied groups, undertake to document the need for a physical rehabilitation center for the state. They went further to suggest that once documentation was developed, it be presented to the appropriate groups of government for planning and development.

We were fortunate at this time to ally ourselves with Dr. Judith Greenwood from the West Virginia School of Medicine's Department of Community Medicine. She undertook the documentation as a project for her department. After a great deal of work, Doctor Greenwood published an excellent study with Dr. R. John C. Pearson of Morgantown entitled, "The Medical Rehabilitation Needs in West Virginia."

In December, 1978, a symposium was held in Charleston to publicize the results of the study. We invited various members of the community to the conference for educational purposes and suggestions as to what direction the Medical Association and other interested people should go in trying to develop a physical rehabilitation center.

'Seed Money' Obtained

In January, 1979, we approached Senator William T. Brotherton, Jr., to seek from the Legislature $50,000.00 in "seed money." The purpose of the money was to help interested groups in planning a physical rehabilitation center. This money was allocated by the Legislature to the Department of Public Health, under then Director George Pickett, M. D. He chaired an ad hoc committee which was formed of interested parties which included representatives from our Association, the hospital association, DVR, Marshall and West Virginia University's Medical Schools, and Workmen's Compensation.

The committee decided to use the $50,000.00 to give grants to hospitals who showed an interest in developing a proposal for a physical rehabilitation center.

Grants then were given to the communities of Charleston, Huntington and Morgantown, as well as Parkersburg and Wheeling. In January, 1980, additional monies were allocated by the Legislature for the study of community-based physical rehabilitation units. Proposals then were made and submitted, but, because of various reasons including inflation, increased costs and the economy, none of the communities embarked upon a building program, and there was little activity.

However, in the fall of 1981, many people suddenly became interested, both in profit and nonprofit organizations. Currently, it appears that the certificate of need organization in state government will be considering many letters of intent and proposals for the development of a comprehensive physical rehabilitation center in Charleston and Morgantown.

It appears at last, after a long period of planning, that the physical rehabilitation facilities needed in the state of West Virginia might become a reality. We anxiously are awaiting further developments.

Respectfully submitted,
R. L. Ghiz, M. D., *Chairman*

Committee On Cancer

The Committee on Cancer met at the State Medical Association's Annual Meeting August 21, 1981, and again in Charleston on January 24, 1982, during the 15th Mid-Winter Clinical Conference.

The State Cancer Plan was discussed extensively. Dr. L. Clark Hansbarger, Director of the State Department of Health, was present. Copies of this plan were circulated to all Committee members. It was proposed that the State Cancer Plan be approved and that cancer be made a reportable disease.

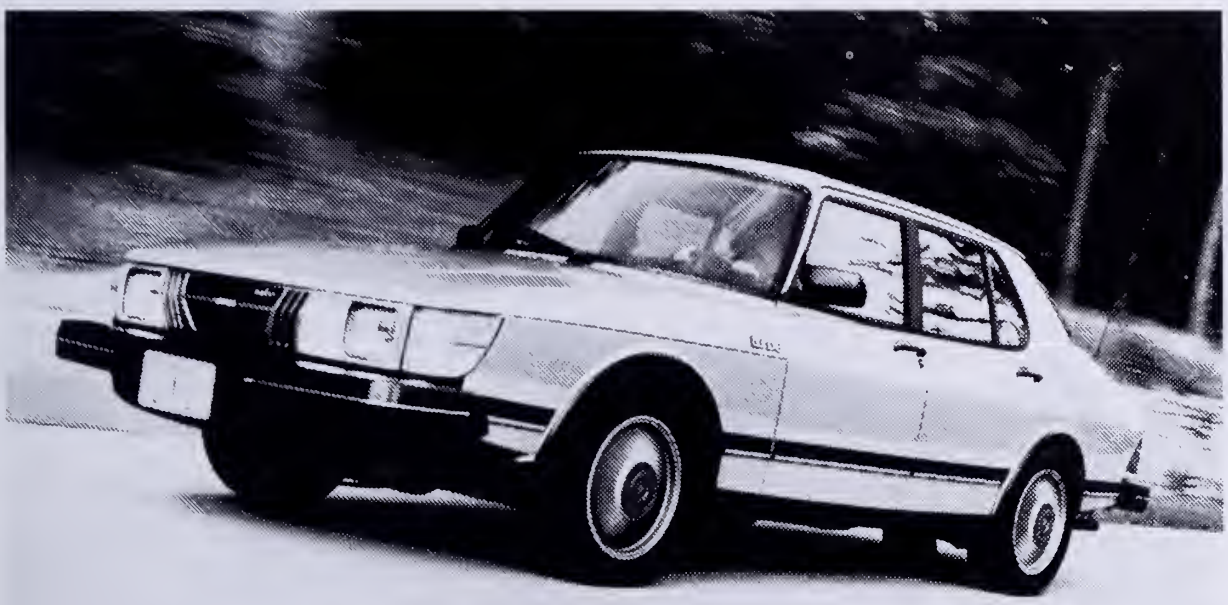
It was recommended that the American Cancer Society Caring and Sharing Program, a program to aid both the cancer patient and the patient's family in their psychological and physiological adjustments, be recommended for endorsement by the State Medical Association.

The American College of Surgeons Liaison Fellow Program is being upgraded. Dr. Alvin L. Watne of Morgantown, Chairman of this Committee, is striving for appointment of a Liaison Fellow at each hospital in the state.

An Ad Hoc Committee composed of Dr. David B. Gray, Charleston; Dr. John C. Frich, Jr., Morgantown; and Alice Conaway, R.N., of the West Virginia Division, American Cancer Society, will work with Doctor Hansbarger in establishing a Central Cancer Registry in the State Health Deparment.

The Community Clinical Oncology Program was discussed, and possibly will be pursued by the Department of Surgery at West Virginia University.

Respectfully submitted,
Alvin L. Watne, M. D., *Chairman*



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WVU Medical Center
–News–

Compiled from material furnished by the Medical Center News Service, Morgantown, W. Va.

School Of Medicine Faculty Promotions Announced

Forty-one faculty members from the School of Medicine have been awarded promotions or granted tenure.

The promotions and tenure grants were approved by the West Virginia Board of Regents and announced by John E. Jones, M. D., Vice President for Health Sciences.

The 41 physicians promoted or granted tenure in the School of Medicine effective July 1, include:

R. Stephen Amato, Professor, Pediatrics; Mohammed Ashraf, Associate Professor, Obstetrics and Gynecology; Soad Bekheit, Associate Professor, Medicine, granted tenure; Edward M. Bosanac, Associate Professor, Community Medicine, granted tenure; Paul B. Brown, Professor, Physiology; Marshall J. Carper, Professor, Family Practice, granted tenure; John P. Claude, Associate Professor, Behavioral Medicine and Psychiatry; Donald W. Cox, Professor, Obstetrics and Gynecology, with tenure; Robert D'Alessandri, Associate Professor, Medicine, granted tenure; Charles M. Davis, Clinical Professor, Orthopedics; Harakh V. Dedhia, Associate Professor, Anesthesiology; Anthony DiBartolomeo, Professor, Medicine; Dinesh M. Doshi, Associate Professor, Anesthesiology;

Ralph O. Dunker, Associate Professor, Neurosurgery, granted tenure; Thomas E. Ellis, Associate Professor, Behavioral Medicine and Psychiatry; Morteza K. Elyaderani, Professor, Radiology;

John F. Foss, Associate Professor, Obstetrics and Gynecology, granted tenure; John C. Frich, Professor, Radiology, granted tenure; Claudia A. Goodwin, Clinical Associate Professor, Radiology; Stephen Grubb, Associate Professor, Medicine, with tenure; Charles L. Harris, Professor, Biochemistry;

Jean Holter, Associate Professor, Pathology; Eric T. Jones, Associate Professor, Orthopedic Surgery; Gordon Keyes, Associate Professor, Pathology, granted tenure; Rashida Khakoo, Associate Professor, Medicine, granted tenure; Rolf F. Kletzien, Associate Professor, Biochemistry, granted tenure; Rudolf K. Lemperg, Professor, Orthopedic Surgery, granted tenure; Robert Martin, Associate Professor, Medicine; Donald E. McDowell, Associate Professor, Surgery, granted tenure; Charles E. Meacci, Associate Professor, Neurology, with tenure; David Z. Myerberg, Associate Professor, Pediatrics, with tenure; Phyllis P. Nash, Assistant Professor, Behavioral Medicine and Psychiatry;

Robert E. Pawlicki, Research Professor, Behavioral Medicine and Psychiatry; V. K. Raju, Associate Professor, Ophthalmology, granted tenure; Frank D. Reilly, Associate Professor, Anatomy, granted tenure; Jeanne A. Rodman, Clinical Professor, Anesthesiology; Franklin S. Schiebel, Assistant Professor, Anesthesiology; Anne Sharpe, Associate Professor, Pathology; Robert L. Smith, Associate Professor, Community Medicine, granted tenure; L. Blair Thrush, Associate Professor, Medicine; and Thomas L. Warren, Assistant Professor, Anesthesiology.

Referrals To WVU Widespread For Rare Procedure

Osteoarthrosis, also known as osteoarthritis or degenerative joint disease, is responsible throughout the world for more lost time from work than any other physicial condition.

Eric L. Radin, M. D., Professor and Chairperson of Orthopedic Surgery, has spent the past 20 years researching the disease, first at Harvard University and at WVU since 1979.

"We can relieve pain with a drug. The best is aspirin. We've been able to arrest the progression in some patients and in others we can turn the disease around and cure it. This is done through stress-relieving operations such as realigning the bones or muscles.

"WVU Hospital is one of the few places that this procedure is done and we've had referrals from Europe and all over the United States," Doctor Radin said.

Update '82

WHEELING CLINIC

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Medicine and Surgery

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The program offers a multi-faceted educational and clinical experience for the physician. SATURDAY—recent advances in Internal Medicine with updates on Arthritis, Hypertension, Nephrology, Obstetrics; choice of various workshops and current concept sessions on Neurology and Child Psychiatry, as well as Cardiology; plus the prestigious Fulton Memorial Lecture. SUNDAY will feature Surgical Infections, Urology and Urinary Tract Infections, update on ENT, Diabetes, Gastroenterology and Ophthalmology with the choice of various workshops.

"Program has been reviewed and is acceptable for 12 Prescribed hours by the American Academy of Family Physicians. This Continuing Medical Education activity is approved for 12 Credit Hours in Category 1 for the Physicians' Recognition Award of the American Medical Association."

THE REGISTRATION FEE is $100.00 for the seminar. This will include admission to the Saturday luncheon for the physician only, as well as the Saturday evening Banquet for the physician and spouse.

Mr. Phil Jones, Washington Correspondent for CBS, will be the Feature Speaker for Saturday's Banquet.

Spouse Program

SATURDAY A full day for "Octoberfest" at beautiful Oglebay Park, Wheeling, West Virginia. Information on other activities in the area will be available at the time of registration. Spouses should provide for all their meals except for the Saturday Banquet.

Registration

Registrations should be sent to: THE WHEELING CLINIC - UPDATE '82: 58 16th Street, Wheeling, WV 26003. Registration fee should accompany your response. Also, please indicate if your spouse will be in attendance.

Overnight Accommodations

Registrants are responsible for their own lodging. A block of rooms has been reserved on a first-come, first-served basis at the Sheraton Inn, Rt. 40, St. Clairsville, Ohio 43950. You may contact Ms. Nancy Easton at 1-614-695-3961 for reservations.

Third-Party News, Views and Program Concerns

Providers Asked To Help Update System

(EDITOR'S NOTE: *Experience has shown that The Journal can be most helpful, in a back-up and other roles, in improving working relationships and communications between practicing physicians and a state agency. We therefore are printing below a letter recently sent to medical providers by the Workmen's Compensation Fund, but perhaps overlooked or misdirected in some instances amid the sea of paper with which doctors' offices must deal. Any questions should be directed to the Fund through P.O. Box 3151, Charleston 25332, attention Information Office, telephone 348-2580.*)

Dear Medical Providers,

In an effort to insure proper payment to those providing services to Workmen's Compensation clients, we are currently in the process of updating our computerized vendor system. Our system presently contains the names and Federal Employer's Identification Numbers or Social Security Numbers of many physicians, hospitals, pharmacists, etc., who no longer provide services to our clients. We have also found that we have multiple Federal Employer's Identification Numbers and/or Social Security Numbers for several of those providing services.

We request your assistance in updating our system. Enclosed is a self-addressed postcard. We request that you complete and return this card to our office at your earliest convenience. This information will be used to update our system and, once this has been accomplished, we will purge the names and Federal Employer's Identification Numbers and/or Social Security Numbers of those no longer doing business with this agency. This information also will be utilized in determining your correct Federal Employer's Identification Number or Social Security Number, and all other numbers will be deleted from the system.

Also, to insure prompt payment to the providers and to permit our monitoring of the services rendered, we find it necessary to require the proper CPT code, in addition to a narrative description, when submitting fee bills to this office. This has been a requirement for some time, but has not been enforced; however, effective July 1, 1982, we will be unable to accept any fee bill without the proper CPT code.

Your assistance in this matter is appreciated.

Very truly yours,
Gretchen O. Lewis
Commissioner

Fraud Division Prepares To Tackle Abusers

The government is readying a potent new weapon to crack down on people who abuse Medicare and Medicaid.

Proposed regulations are designed to carry out a section of a 1981 law that establishes a civil fraud division in the Inspector General office at the Health and Human Services Department.

The ability to proceed against abusers by the civil as well as criminal route is regarded by the IG's office as giving the government much broader powers to punish providers and patients involved with false, exaggerated claims.

The law gives the government authority to assess a $2,000 fine for every false claim or statement submitted, whether or not it was accepted by Medicare or Medicaid for payment. Legislation was presented to the Senate (S.1780) that would increase the penalty to $10,000 per count and give the IG added powers.

Under the law, civil penalties may be assessed upon criminal conviction in federal or state courts.

However, the major thrust of the new civil fraud division will be against people who, for one reason or another, are not prosecuted criminally. In this event, the prosecution, investigation and judgment will be handled "in house," within the HHS Department without recourse to the courts. Administrative law judges will hear the cases. The final decisions will be signed off by the HHS Secretary. The appeal would have to be to the U. S. Court of Appeals.

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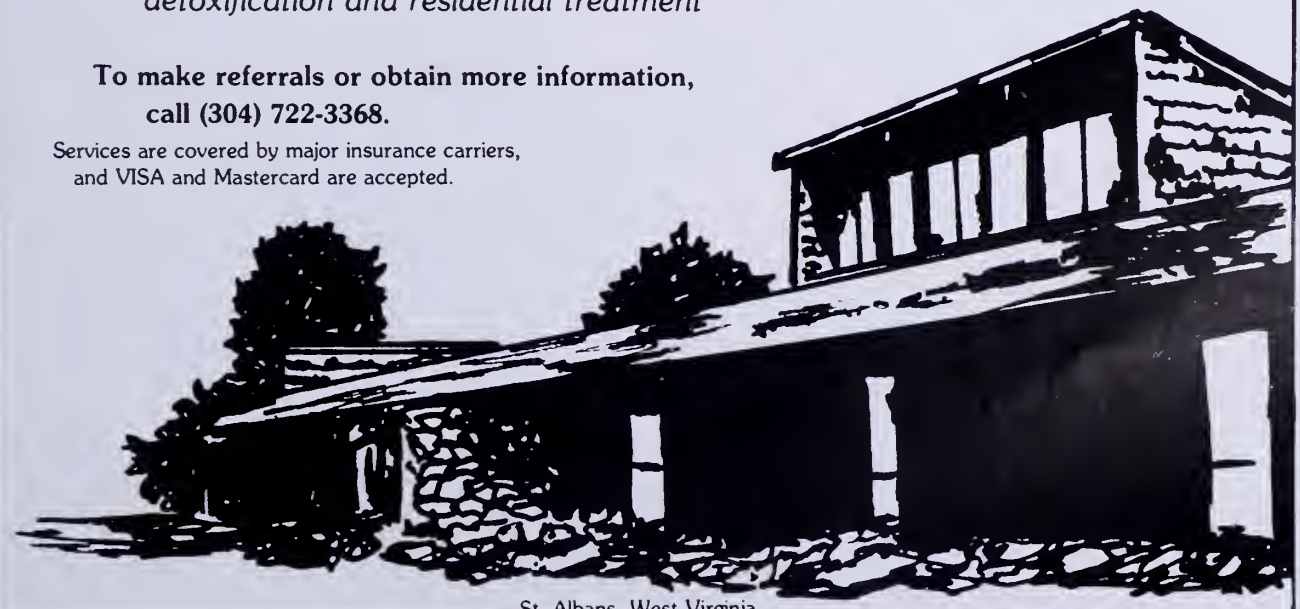

St. Albans, West Virginia

Obituaries

HARRY D. CHAMBERS, M. D.

Dr. Harry D. Chambers of Huntington died on July 3 in a Milton nursing home. He was 83.

A native of Dameron (Raleigh County), Doctor Chambers was graduated from Marshall College and received his M. D. degree in 1925 from Jefferson Medical College. He went to Whitesville (Boone County), where he was a general practitioner for 19 years.

In 1945, he received postgraduate training in pediatrics at the University of Pennsylvania. In 1946, he went to Huntington and practiced as a pediatrician until he retired in 1974.

Doctor Chambers, President of the Boone County Medical Society in 1942, was an honorary member of the Cabell County Medical Society, West Virginia State Medical Association and American Medical Association.

Survivors include the widow; a daughter, Mrs. Pat Plumley of Beckley; two sisters, Mrs. Garnett Jerrell and Mrs. Pearl Stover, and one brother, Carl Chambers, all of Beckley.

* * *

HAROLD B. SUNDAY, M. D.

Dr. Harold B. Sunday of Fort Mill, South Carolina, formerly of Charleston, died on July 1 in a Charlotte, North Carolina, hospital. He was 72.

Doctor Sunday, an orthopedic surgeon, began practice in West Pittston, Pennsylvania, and then practiced in Charleston for more than 20 years before retiring to Summersville in 1973. He moved to Fort Mill in 1979.

Born in Epsy, Pennsylvania, he was graduated from Susquehanna University in Selinsgrove, Pennsylvania, and received his M. D. degree in 1936 from Temple University. He interned at Williamsport (Pennsylvania) Hospital and took his residency at Tulane Medical School.

A veteran of World War II, Doctor Sunday was a former member of the Kanawha Medical Society and the West Virginia State Medical Association.

Survivors include the widow; two sons, Harold R. Sunday of Fort Mill and Robert E. Sunday of Charleston, and a sister, Mrs. Randall Clees of Montoursville, Pennsylvania.

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Karl J. Myers, Jr., M. D.
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J. B. Astik, M. D.

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J-9043-4 July 1981

The Physician's Sleep Glossary

Some common sleep laboratory terms

poly•som•no•graph. An instrument which simultaneously records by electrodes physiological variables during sleep—for example, brain activity (EEG), eye movements (EOG), muscle tonus (EMG) and other electrophysiological variables. These readings indicate precisely when patients fall asleep, how many wake periods they experience, the quality of sleep and the duration of sleep.

sleep la•ten•cy. The period of time measured from "lights out," or bedtime, to the commencement or onset of sleep.

wake time af•ter sleep on•set. Intervals of time spent awake between onset of sleep and the end of the sleep period. The polysomnograph registers the length and frequency of the intervals.

to•tal sleep time. The amount of time actually spent in sleeping. This is estimated by subtracting wake times from the period encompassed by the onset and the termination of sleep.[1]

REM/NREM. 1. REM, or rapid eye movement, sleep is "active"—characterized by increased metabolic rates, elevated temperature and arousal-type EEG patterns. 2. NREM, or non-rapid eye movement, sleep represents "quiet" sleep stages. There are four distinct stages of NREM sleep.[2]

re•bound in•som•nia. A statistically significant worsening of sleep compared to baseline on the nights immediately following discontinuation of sleep medication.[3]

References: 1. Williams RL, Karacan I: Introduction, chap. 1, in *Sleep Disorders: Diagnosis and Treatment*, edited by Williams RL, Karacan I, Frazier SH. New York, John Wiley & Sons, 1978, p. 2. **2.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **3.** Kales A *et al: JAMA 241*:1692-1695, Apr 20, 1979. **4.** Kales A *et al: J Clin Pharmacol 17*:207-213, Apr 1977 and data on file, Hoffmann-La Roche Inc., Nutley, NJ. **5.** Kales A: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **6.** Kales A *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **7.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 15, 1978. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Dement WC *et al: Behav Med 5*(10):25-31, Oct 1978. **10.** Vogel GW: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **11.** Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington, DC, May 3-7, 1971. **12.** Pollak CP, McGregor PA, Weitzman ED: The effects of flurazepam on daytime sleep after acute sleep-wake cycle reversal. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, June 30-July 4, 1975. **13.** Zimmerman AM. *Curr Ther Res 13*:18-22, Jan 1971. **14.** Kales A, Kales JD: *Pharmacol Physicians 4*(9):1-6, Sep 1970. **15.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

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Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patient to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, e.g., excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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County Societies

McDOWELL

The McDowell County Medical Society met on June 16 in the Stevens Clinic Hospital in Welch.

The Society approved plaques in the memory of the late Dr. Richard E. Davenport of Princeton, a former emergency room physician at Stevens Clinic Hospital, and the late Dr. Charles F. McCord of Welch. The plaques will be placed in the new chapel at the hospital.—Muthusami Kuppusami, M. D., Secretary.

* * *

PARKERSBURG ACADEMY

Dr. M. Terry McEnany of Columbus, Ohio, was the guest speaker for the meeting of the Parkersburg Academy of Medicine on May 12 at the Parkersburg Country Club.

Doctor McEnany is Chief of Thoracic Surgery at Ohio State University.

The Academy approved a joint project with the Auxiliary of sending clothing to Poland, with the Auxiliary collecting the clothing and the Academy paying the postage.—Michael Morehead, M. D., Secretary.

* * *

CABELL

The Cabell County Medical Society met on June 10. The June meeting was designated "Presidents Day" in honor of all past presidents of the Society. Nineteen past presidents were present.

Dr. Frank C. Hodges of Huntington was presented a plaque honoring the 55th anniversary of his presidency.

Dr. Hossein Sakhai, the President, read the original minutes that established the Society in 1891, and other members and past presidents reminisced about the lighter side of past Society events. Dr. Charles C. Turner gave a brief update on the history of the Society that is being written by Charles Moffatt, Ph.D., Huntington historian.—Maurice A. Mufson, M. D., Secretary.

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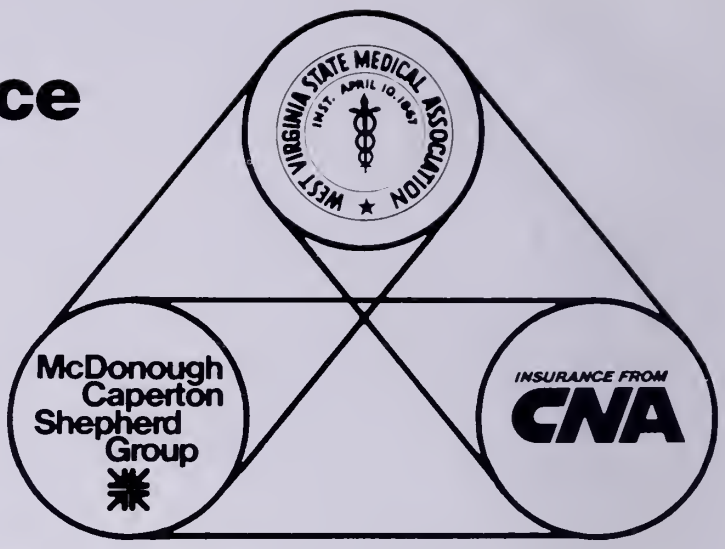

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Reprinted from The West Virginia Medical Journal, September 1981

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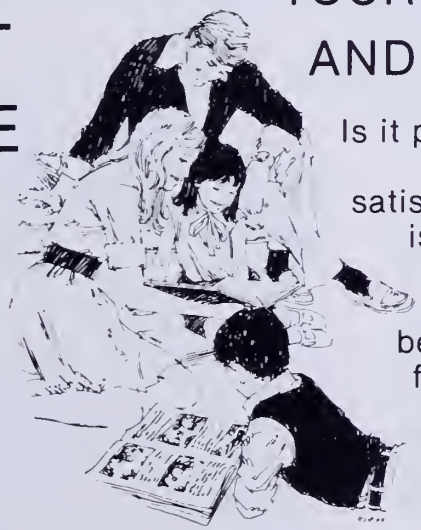

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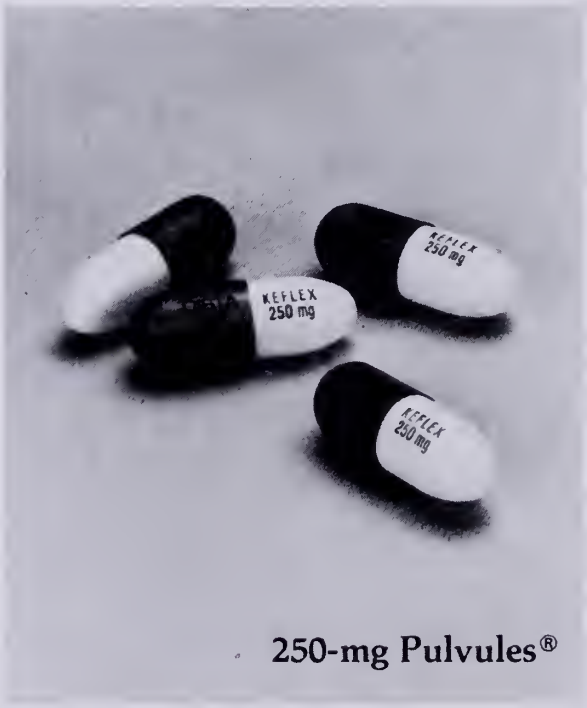

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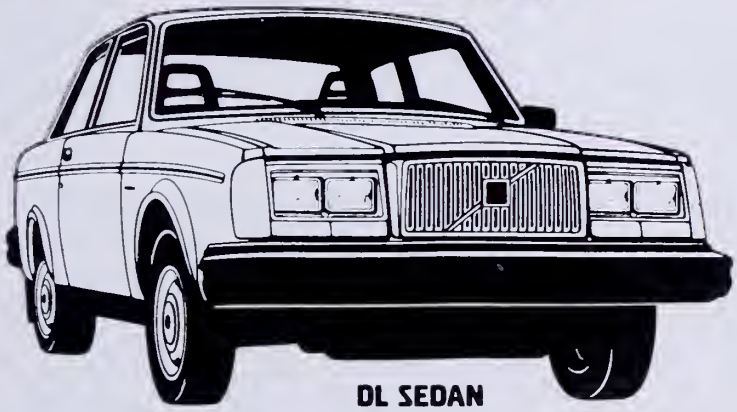

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The Physician's Sleep Glossary

Some common sleep laboratory terms

poly•som•no•graph. An instrument which simultaneously records by electrodes physiological variables during sleep—for example, brain activity (EEG), eye movements (EOG), muscle tonus (EMG) and other electrophysiological variables. These readings indicate precisely when patients fall asleep, how many wake periods they experience, the quality of sleep and the duration of sleep.

sleep la•ten•cy. The period of time measured from "lights out," or bedtime, to the commencement or onset of sleep.

wake time af•ter sleep on•set. Intervals of time spent awake between onset of sleep and the end of the sleep period. The polysomnograph registers the length and frequency of the intervals.

to•tal sleep time. The amount of time actually spent in sleeping. This is estimated by subtracting wake times from the period encompassed by the onset and the termination of sleep.[1]

REM/NREM. 1. REM, or rapid eye movement, sleep is "active"—characterized by increased metabolic rates, elevated temperature and arousal-type EEG patterns. 2. NREM, or non-rapid eye movement, sleep represents "quiet" sleep stages. There are four distinct stages of NREM sleep.[2]

re•bound in•som•nia. A statistically significant worsening of sleep compared to baseline on the nights immediately following discontinuation of sleep medication.[3]

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References: 1. Williams RL, Karacan I: Introduction, chap. 1, in *Sleep Disorders: Diagnosis and Treatment*, edited by Williams RL, Karacan I, Frazier SH. New York, John Wiley & Sons, 1978, p. 2. **2.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **3.** Kales A *et al: JAMA 241*:1692-1695, Apr 20, 1979. **4.** Kales A *et al: J Clin Pharmacol 17*:207-213, Apr 1977 and data on file, Hoffmann-La Roche Inc., Nutley, NJ. **5.** Kales A: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **6.** Kales A *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **7.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 15, 1978. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Dement WC *et al: Behav Med 5*(10):25-31, Oct 1978. **10.** Vogel GW: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **11.** Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington, DC, May 3-7, 1971. **12.** Pollak CP, McGregor PA, Weitzman ED: The effects of flurazepam on daytime sleep after acute sleep-wake cycle reversal. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, June 30-July 4, 1975. **13.** Zimmerman AM: *Curr Ther Res 13*:18-22, Jan 1971. **14.** Kales A, Kales JD: *Pharmacol Physicians 4*(9):1-6, Sep 1970. **15.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

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	Whipworm	Common Roundworm	Hookworm	Pinworm
cure rates				
mean	68%	98%	96%	95%
(range)	(61-75%)	(91-100%)	–	(90-100%)
egg reduction				
mean	93%	99.7%	99.9%	–
(range)	(70-99%)	(99.5%-100%)	–	–

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The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.
Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma, may be used in patients with open angle glaucoma who are receiving appropriate therapy.
Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed, drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation. The clearance of Valium and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.
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Dosage: Individualize for maximum beneficial effect. *Adults.* Anxiety disorders, symptoms of anxiety, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed, adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients.* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children.* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).
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Review Article

Dementia: An Overview

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All patients with a history of mental deterioration deserve a thorough workup searching for treatable causes of dementia. This workup should be undertaken in all demented patients because of the devastating nature of the illness and the importance of defining the problem.

Additionally, the emotional turmoil that the caretaker of a demented patient undergoes is considerable, especially if the patient is cared for at home. A firm diagnosis, even if no specific treatment is available, is supportive. Drug therapy with small doses of major tranquilizers is useful in patient management.

Dementia is the impairment of intellectual function, judgement, orientation, and affect, despite a state of clear consciousness. It has become an important medical, social and economic problem today as the elderly population in the United States continues to increase rapidly. In 1950, eight per cent of the population was over 65, which amounted to 12.3 million persons. By 1978, the percentage had risen to 11 per cent and 22 million persons. By 2030, it is estimated that those over 65 will comprise 17-20 per cent of the population, or about 51 million persons.[1]

Dementia represents a major health problem among the elderly, especially in the form of Alzheimer's disease, which is estimated to be the fourth or fifth most common cause of death in the United States (death rarely results from Alzheimer's disease per se, but instead from complications such as respiratory tract infections).[1]

The rarely remitting nature of the dementias in general, their morbidity and mortality, and the hardship and guilt that families endure with loved ones make the dementias a challenging illness. Thus, physicians in all disciplines should have an understanding of the clinical presentation, causes, management, and possible treatment of dementia.

This paper will attempt to provide a general overview of these issues. It will focus on Alzheimer's disease because it is the most common cause of dementia. Multi-infarct dementia is frequently misunderstood and, therefore, will be briefly reviewed. Treatable and reversible dementias will be emphasized. Parkinson's disease, Huntington's chorea, and Creutzfeldt-Jakob disease also will be discussed.

Definition, Clinical Presentation

Dementia is a deterioration or loss of intellectual functioning. Demented patients will have difficulty with memorization, learning of new material, problem solving, abstract thinking, verbal capacity, arithmetic abilities, and visual-spacial relationships.

The earliest and most persistent symptom of dementia is impaired memory. This is usually brought to the physician's attention by family members and other observers, rather than the

patient. These people also may complain that the patient is "not himself." Detailed questioning may reveal that this means altered drives, mood, enthusiasms, capacity to give and receive affection, or creativity. The patient himself, however, focuses instead on somatic complaints. Symptoms may be overlooked by family members. The onset of the illness is usually dated in retrospect and without precision.

As the disease progresses, the patient's anxiety increases. Marked irritability and outbursts of anger may occur. The patient fails to respond to the environment with customary speed and accuracy. He is easily distracted and has difficulty with problem solving. As the patient becomes aware of his problems, depression often ensues, and he turns to written reminders and mnemonic schemes to continue to function in society. Memory loss is most obvious in recently acquired material. The individual avoids decisions and choices to protect himself from the embarrassment of incompetence. As dementia worsens, drives and feelings diminish. Appropriate dress and personal cleanliness are ignored, and concern for others often ends. Motor and sensory neurological abnormalities appear.

Unless a treatable cause is found, the dementias are unremitting. The individual loses drive and ambition, becoming apathetic. The "human" aspects of personality disappear, with blunting of all feelings. The patient now requires close care, and is disoriented to place and time. Recent and remote memory are defective. He is indifferent and unaware of people and situations. Death is inevitable.

Pre-Senile Versus Senile Dementia

One of the most misunderstood concepts about dementia is the subject of pre-senile versus senile dementia. Pre-senile and senile dementia often have been regarded as separate disease entities. These are, however, just descriptive terms describing a symptom complex relative to the patient's age. They give no information regarding the underlying disease process.

Alzheimer's Disease

The most frequently encountered form of progressive dementia in adults is Alzheimer's disease. The condition was described first in 1906 by Alois Alzheimer, who recognized it as a separate disease. It is a disease which is unique to man, relentlessly progressive, and refractory to treatment. The prevalence rate is greater than 300 per 100,000 of the total population, and is increasing as the fraction of the population greater than 65 years of age is increasing.[2] Although the disease has been described in all ages, the peak incidence is in the fifth and sixth decade of life. There is an even sex distribution. There are some well-documented cases of familial occurrence; however, most often the disease is sporadic with no consistent genetic pattern.

Sixty to 70 per cent of the elderly who present with clinical signs of dementia will have Alzheimer's disease.[3] Clinically, the initial features of impaired memory (which is most obvious in recently acquired material), difficulty with problem solving, lessened response to the environment, and distractibility are indistinguishable from any other dementia. Alzheimer's disease is a global process, and is progressive over 8-10 years in the fashion described earlier.

In Alzheimer's disease, focal signs such as aphasia and apraxia may occur. Less prominent features which may occur later in the disease include disorders of gait, limb paralysis, myoclonic jerks, seizures, and urinary incontinence. Grasp, suck, and snout reflexes may appear. The most common cause of death is respiratory tract infection.

Standard laboratory tests are normal throughout the illness. There are no signs of systemic disease. CSF studies are usually normal. The EEG may be abnormal and may show absence or reduction of background alpha activity. This may progress to slower rhythms in the theta and delta ranges. However, the amount of cerebral atrophy or the duration of the illness correlates poorly with the degree of EEG abnormality. A CT scan may be entirely normal or demonstrate symmetrically-enlarged ventricles, prominent dilated sulci, and enlarged sylvian fissures, but no focal abnormalities.

Pathological Features

The diagnosis of Alzheimer's disease can be confirmed by biopsy or autopsy. There are five characteristic pathological features: 1) On gross examination, there is generalized atrophy of the brain which is most obvious in the frontal, occipital and temporal lobes. There is widening of the cortical sulci and enlargement of the ventricles. 2) There is preservation of laminations of the cerebral neurons, but loss of cells. 3) Argyrophilic senile plaques are found mainly in the cerebral cortex and are seen in layers in which the cell loss is most marked. Plaques are most numerous in the frontal and occipital lobes, the insular cortex, and the hippocampus. They also are seen in diencephalic structures, but are less numerous than in the cortex. The brainstem

and cerebellum are relatively free of senile plaques. 4) Neurofibrillary tangles are seen in silver stain preparations. These neurofibrillary changes are usually widespread, affect the pyramidal cells of the frontal and occipital cortex, and parallel the senile plaques in distribution. 5) Granulovacular degeneration of the nerve cells is less prominent, and probably represents an early stage of degeneration which ultimately is seen as the neurofibrillary tangle.

The etiology of Alzheimer's disease is obscure. Physiologically, a selective dysfunction in central cholinergic mechanisms has been demonstrated. Recent new and exciting studies show that the activities of choline acetyl transferase (the enzyme synthesizing acetylcholine) and acetylcholinesterase may be reduced by 50 per cent in Alzheimer's disease. It also has been shown that such reductions parallel increases in morphologic abnormalities.[4,5,6] Even more exciting and recent is the selective loss of cholinergic neurons in the nucleus basalis of Meynert in Alzheimer's disease.[7] Whitehouse *et al.* postulate that this "cell loss may represent an anatomical correlation of the loss of cholinergic markers and may be partly responsible for the the cognitive and behavioral disturbances" in Alzheimer's disease.[7]

Attempts to raise the plasma choline (precursor of acetylcholine) levels have failed to improve performance significantly or alleviate the condition. Dietary choline or its precursor, lecithin (which can be purchased at almost any health food store), is therefore useless in treating Alzheimer's disease. Alzheimer's disease remains an untreatable illness.

Multi-Infarct Dementia and Lacunar State

The relationship of atherosclerosis and dementia often has been misunderstood. Both the incidence of atherosclerosis and of mental deterioration increase with age. This has led to the image of senility being caused by progressive chronic ischemia secondary to atherosclerosis of the cerebral vasculature. However, when vascular disease is responsible for dementia, it is through the occurrence of multiple small or large cerebral infarcts. Small infarcts are called lacunes and result from occlusions of small, terminal arteries. This "lacunar state" follows a series of abrupt episodes in which the patient has widespread neurological deficits. These deficits may clear with only minor residua. As the number of lacunar infarcts increases, so does the sum of prior deficits. It is then that the patient may begin to show signs of dementia. The progression may be so subtle as to make the worsening appear very gradual, but most of the time there is a stuttering course.

The early appearance of bipyramidal disease (rigidity, increased deep tendon reflexes, extensor plantar responses) along with pseudobulbar palsy and emotional lability, before full fledged dementia, helps to clarify the diagnosis. These signs help differentiate this process from Alzheimer's disease.

The lacunar state is often associated with hypertension. Once the state of dementia is reached, treatment of hypertension will not reverse the disease. Thus, the only treatment is preventive.

Multiple large cerebral infarcts also can produce a condition in which dementia may be the dominant symptom. Hachinski *et al.* suggest that "most of these cerebral infarcts are secondary to disease of the extracranial arteries and the heart."[8]

Multi-infarct dementia represents only a small group of patients who present with dementia (12-15 per cent).[9] However, it is important to understand as it may be a preventable disease in patients with hypertension.

Parkinson's Disease

Parkinson's disease is a slowly progressive disorder of the basal ganglia which has the cardinal clinical features of tremor, rigidity, hypokinesia, and disorders of posture and equilibrium. The onset of the disease is commonly between 50-65 years of age, but may appear much earlier in life. Its prevalence is estimated at 90/100,000 population.[10] Men are only slightly more frequently affected than women and, in the United States, occurrence in blacks is 6-10 times less than in whites. Several reports have suggested genetic influence in the etiology of Parkinson's disease, with a dominant mode of inheritance.[11]

In Parkinson's original description he states that "the sense and intellect are uninjured."[12] However, we now know that 15-30 per cent of patients with Parkinson's disease show some evidence of intellectual deterioration.[13] These individuals frequently lack proper orientation, and have defects in recent memory. They also may have difficulty with calculations and abstractions.

Loranger *et al.* demonstrated intellectual impairment in patients with idiopathic Parkinsonism using the Wechsler Adult Intelligent Scale. They showed an improvement of 10 IQ

points or more after retesting patients receiving L-dopa for 5-13 months. However, this beneficial effect was not maintained. Almost all the patients reverted back to their pre-treatment level of intellectual functioning after 30 months of L-dopa therapy.[14,15] Permanent dementia has been described as a possible adverse effect of L-dopa therapy.[16]

Dementia may occur before, concomitant with, or after classic signs of Parkinson's disease. However, a patient who presents with dementia alone has a far greater statistical likelihood of having Alzheimer's disease than incipient Parkinsonism.

Normal Pressure Hydrocephalus

Normal pressure hydrocephalus is a clinical triad of disturbances of gait, urinary incontinence and progressive dementia accompanying a communicating hydrocephalus with a normal cerebrospinal fluid pressure. The illness typically has an indefinite onset, and the course includes brief periods of improvement or worsening, but usually is ultimately progressive.

The dementia initially may be mild with impairment of memory, lack of spontaneity, easy distractability and slowness of mental activities. Memory may become severely involved; however, other aspects of mental functions such as reading, writing, comprehension and the use of language remain relatively unaffected. Depression is a frequent accompaniment of normal pressure hydrocephalus.

Gait impairment is the hallmark of the typical syndrome, and often is the most disturbing symptom. The gait has elements of spasticity and ataxia, but the ataxia is not associated with evidence of cerebellar disturbance. The disturbances of motor function often are limited to the lower extremities. There are rigidity and increased reflexes with relative preservation of strength. Plantar stimulation may be either extensor or flexor. Urinary incontinence is reported as a frequent occurrence late in the disorder.

Normal pressure hydrocephalus can be a sequelae of subarachnoid hemorrhage, cerebral trauma, or chronic meningeal infection. In the majority of cases, however, the etiology is unknown.

Normal pressure hydrocephalus is a difficult diagnosis, which is based primarily on the clinical presentation and normal cerebrospinal fluid pressure. A CT scan may show ventricular enlargement without evidence of cortical atrophy, but, in general, CT and cisternography have not proved to be valuable aids in the diagnosis.

Successive lumbar punctures may result in some improvement. Patients who improve on this therapy should be considered for a CSF shunting procedure, which remains the only treatment with any success. Various CSF shunting procedures have been tried and resulted in improvement in some patients. The actual percentage of patients who improve varies from series to series. Of the symptom triad, mental symptoms improve the most rapidly following shunting procedures. The urinary incontinence also may improve, while gait disturbance is the slowest to improve.[17]

Creutzfeldt-Jakob Disease

Creutzfeldt-Jakob disease is a rare cause of dementia. Its importance lies in its unique etiology. It is the only form of dementia which has been shown to have person-to-person transmission. The principal clinical features of Creutzfeldt-Jakob disease are dementia, upper motor neuron disorders, myoclonus and, more rarely, lower motor neuron signs. There is rapid progression and an even sex distribution.

Dementia is the most frequent presenting manifestation, especially with memory loss. Creutzfeldt-Jakob disease is unique because its progression frequently can be measured day by day. Motor disorders usually follow the dementia but can occur simultaneously. A rapidly progressive dementia with early appearance of cortical dysfunction and myoclonus should raise immediately the possibility of Creutzfelt-Jakob disease. This condition usually is apparent from 40-60 years of age. Death usually ensues within months after the diagnosis has been made.

Creutzfeldt-Jakob disease has been shown to be a transmissible illness. Chimpanzees have been inoculated with suspensions of brain material from affected patients. Eleven to 16 months following inoculation, the animal developed a remarkable similar illness.[18]

There are several reports of well-documented, person-to-person transmission. An example is a cornea transplant patient. In this case, a 55-year-old man died of pneumonia following an illness marked by incoordination, memory deficit, involuntary movements, and myoclonus. An autopsy showed the characteristic findings of Creutzfeldt-Jakob disease. The cornea was transplanted into a 55-year-old woman who 18 months later developed difficulty swallowing, mutism and myoclonus. An autopsy showed Creutzfeldt-

Jakob disease.[19] It also may occur in more than one member of a family.

Huntington's Chorea

Huntington's chorea is an autosomal dominant disorder which is characterized by progressive chorea and dementia. Its onset usually is between the late 20s and mid 40s, but spans early childhood to the early 70s. The sexes are affected equally. The reported prevalence in the United States is four to five per 100,000 population.

There appear to be two clinical types of the disease, the adult-onset form of the disease, and the juvenile, rigid-akinetic type, sometimes referred to as the Westphal variant. If the disease presents before the age of 20, it probably has been transmitted by the father. Observations have shown that 75-80 per cent of childhood Huntington's chorea have an affected father.

The exact onset of the disease often is not clear. The patient initially may present only as a "nevous, restless," or as a "mentally unstable" individual. Usually, the disease manifests itself by involuntary motor disturbances, although the mental alteration may proceed, follow, or accompany the motor problem. Initially, the involuntary movements may consist of twitching of fingers and toes, grimacing of the face, restlessness, and often will be incorporated into purposeful actions. As the disease progresses the patient loses ability to disguise involuntary movements, and they may become choreiform, abrupt and jerky.

Intellectual deterioration progresses in a typical fashion as described earlier. It is important to note that the incidence of suicide is high in families with Huntington's chorea. At times, criminal behavior is reported in Huntington's patients. Huntington's disease is slowly progressive, with death occurring from 13-20 years after the onset of symptoms. The most common cause of death is respiratory tract infections, as is true with all forms of dementia.

At autopsy there is extensive degeneration of the brain with atrophy. This is most marked in the caudate nucleus and putamen, but also occurs in the cortex with enlargement of the ventricles. It is difficult to relate the degree of chorea or amount of cell loss to the degree of dementia.

Biochemical abnormalities have been found in the brains of patients with Huntington's chorea. There seems to be a significant reduction in levels of some neurotransmitters and choline acetyl transferase in the basal ganglia.[20,21,22,23]

Treatment of Huntington's chorea is directed at lessening the choreic movements rather than altering the course of the disease. Reserpine, Haloperidol, Tetrabenazine, and Amantadine all have been used.

It is important to make the diagnosis of Huntington's chorea, for the only way to prevent the disease is to discourage reproduction by affected individuals. Autosomal dominant inheritance means the offspring will have a 50-per cent chance of developing the disease; unfortunately, amniocentesis cannot help determine whether the gamble is won or lost.

Toxic and Metabolic Causes

Dementia also can be seen secondary to toxic and metabolic disturbances. The dementia can range anywhere from the subtle form of inattentiveness, difficulty with problem solving and disorientation to more severe incidences with marked confusion, depressed spontaneous activity, and severe disturbances of mental functioning. Toxic dementias can be accentuated in the elderly population by the added insult of strange surroundings.

The dementia in toxic and metabolic disorders is nonspecific, and the physician often has to rely on associated clinical manifestations (for example asterixis) and laboratory findings to make the correct diagnosis.

Vitamin B12 deficiency is a well-known cause of dementia and can be seen in a variety of disorders. Patients with pernicious anemia, gastrectomy, or alcoholism with nutritional deficiencies are examples of individuals likely to have B12 deficiency. The dementia characteristically consist of impairment of all intellectual functions, including memory. The patient also may have a marked disturbance of mood or even paranoid features. Signs of posterolateral spinal cord dysfunctions may occur, and their presence should suggest B12 deficiency. Significant improvement may be seen with vitamin B12 therapy.

Wernicke Korsakoff Syndrome is seen most frequently in alcoholic patients and is related to their nutritional deficiencies. However, Korsakoff's psychosis also may be seen in patients with tumors of the third ventricle, post-anoxic encephalopathies, and as a sequela to herpes-simplex encephalitis.

Wernicke's disease and Korsakoff's psychosis are not separate diseases, but rather, successive stages of the same disease. Features of Wernicke's include ophthalmoplegia, ataxia, and mental changes, while defective memory is the

most prominent feature of Korsakoff's psychosis. The memory defect of Korsakoff's psychosis is especially apparent in the inability to store and recall new information and difficulty in chronologically ordering past events. This leads to confabulation. Patients generally have limited insight into their disability and are apathetic. However, they remain alert, responsive, aware of their surroundings, and can understand the meaning of what is said to them. The symptom complex should be thought of as a continuum of the same process, but called Wernicke's disease or Korsakoff's psychosis, and if both components are present, then Wernicke-Korsakoff syndrome.

Treatment is through administration of thiamine, which is of dramatic benefit for the acute Wernicke's disease, but not helpful for the static deficits of Korsakoff's psychosis. It is important that 50-100 mg. of thiamine be given IV before a patient with Wernicke's receive a glucose load (even a D5W infusion). A glucose load can exhaust meager thiamine stores and thereby produce the irreversible Korsakoff's psychosis.

Hypoxia-Ischemia, whatever the cause, affects the central nervous system and leads to neuronal dysfunction and neuronal death. The gray matter of the cerebral hemispheres, the cerebellum, and the pyramidal layers of the hippocampus appear to be the most vulnerable areas. Thus, varying degrees of dementia are seen. Other residual neurological features may include hemiparesis, aphasia, apraxia, and myoclonic jerks. Many patients, after prolonged cardiopulmonary resuscitation will display some signs of anoxic brain damage. Recovery from an anoxic episode may be partial or complete.

Similar to hypoxia are the effects of *hypoglycemia.* Individuals with repeated hypoglycemic attacks may have dementia, personality changes, hemiparesis, aphasia, and other extrapyramidal manifestations.

Dementia can be seen in a variety of endocrinologic diseases including *myxedema, hypoparathyroidism* and, more rarely, *hyperparathyroidism.* It is extremely important for physicians to recognize these diseases as being potential causes of dementia, for they are treatable diseases. If suspected, routine thyroid studies and parathyroid studies should be done. *Chronic hepatic insufficiency* and *uremia* also have been shown to cause dementia.

Mass Lesions

Space-occupying lesions including subdural hematomas and primary brain tumors, especially frontal tumors, have been reported to cause dementia and emotional disorders. Edema, compression of neighboring structures, and increased intracranial pressure probably contribute to the clinical picture.

Infections

An acute viral encephalitis may cause a subsequent dementia. This is particularly true of herpes-simplex encephalitis, which has a predilection for involvement of the temporal lobes.[26] Chronic meningitis, especially tuberculous or cryptococcal disease, is uncommon, but can occur and be a cause of dementia.

Conclusion

All patients with a history of mental deterioration deserve a thorough workup searching for treatable causes of dementia. A good medical history as well as physical examination should be the starting point, followed by some simple laboratory screening tests. This includes a complete blood count, liver function tests, some measure of renal function. serum calcium, phosphorus, sodium, chloride, potassium, CO_2, serum B12, and folate levels. Thyroid function tests, serology, EKG, chest x-ray, CT scan, lumbar puncture, and EEG also are indicated. This workup (costing $800-$1,000) should be undertaken in all demented patients because of the devastating nature of the illness and the importance of defining the problem.

Additionally, the emotional turmoil that the caretaker of a demented patient undergoes is considerable, especially if the patient is cared for at home. Some disruption of household family routine is unavoidable. A firm diagnosis, even if no specific treatment is available, is supportive. In this circumstance much can be done to aid patient management. Drug therapy with small doses of major tranquilizers (for example, Haldol and Mellaril) is useful in management. Counseling caretakers and family members, and environment manipulation all can be helpful.

And Now For A Quiz On The Material Presented Above!

(Answers on Page xxvii)

1. The most common cause of dementia in the adult is
   A. Arteriosclerosis
   B. Alzheimer's disease
   C. Huntington's chorea
   D. Hypothyroidism
   E. Creutzfeld-Jakob disease

2. Which of the following *definitely* would establish a diagnosis of Alzheimer's disease?
   A. EEG
   B. CSF analysis
   C. CT scan
   D. Psychological testing
   E. Brain biopsy
3. Recent evidence suggests that Alzheimer's disease selectively may involve degeneration of cholinergic (acetylcholine) neurons.
   True —— False ——
4. Which is a hallmark of normal-pressure hydrocephalus?
   A. Gait apraxia
   B. Incontinence
   C. Dementia
   D. Normal CSF pressure
   E. All the above
5. Acute Wernicke-Korsakoff syndrome may be helped dramatically by treatment with intravenous
   A. Vitamin B12
   B. Thiamine
   C. Pyriodoxine
   D. Glucose
   E. Valium
6. Which of the following are treatable causes of a dementia?
   A. Hypothyroidism
   B. Pernicious anemia
   C. Chronic meningitis
   D. Chronic subdural hematomas
   E. All of the above
7. Huntington's disease is inherited in an autosomal dominant fashion.
   True —— False ——
8. Creutzfeldt-Jakob disease is due to a transmissible agent.
   True —— False ——
9. Addition of choline or lecithin to the diet of patients with Alzheimer's disease has been shown to be of therapeutic value.
   True —— False ——
10. L-dopa produces significant and prolonged improvement of the dementia occurring in Parkinson's disease.
   True —— False ——

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Use Of Dexamethasone Suppression Test In Clinical Psychiatry

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The dexamethasone suppression test (DST) is a specific biological marker for major depression. Its use can assist the clinician in the diagnosis and management of such patients. The authors present their experience with the test, and recommend its utilization in modern psychiatric practice.

ADVANCES in neuroendocrine research over the past decade have established that pituitary hormones are controlled by the hypothalamus via releasing factors, and that these hypothalamic releasing factors are in turn modulated by biogenic amines from other CNS centers.

Likewise, there is accumulating evidence for definite neuroendocrine abnormalities in major depressive disease.[1,2] Among the most widely-studied neuroendocrine parameters in psychiatry is hypothalamic-pituitary-adrenal (HPA) axis activity.[3,4] Consistent findings in depressed patients are: 1) hypersecretion of cortisol, 2) a relative flattening of the normal circadian cortisol curve with increased secretion in the afternoon and evening hours, and 3) failure of the HPA axis to respond with negative feedback to the exogenous glucocorticoid, dexamethasone, leading to "early escape" from the normally expected suppression of serum cortisol. Presumably, the same postulated deficits in the biogenic amines, norepinephrine and serotonin, which account for the depressive symptomatology, also cause alterations in hypothalamic-pituitary output. This leads to the observed oversecretion of cortisol.

Based on the findings of nonsuppression following dexamethasone administration in depressives, psychiatrists recently have utilized the overnight dexamethasone suppression test (DST) as a specific biological marker for the major (endogenous) depressive syndrome.[5,6] In this paper we will discuss the test and its clinical utility in psychiatry for the diagnosis and treatment of depression. We then will present data and case vignettes of our experience with the DST at the West Virginia University Medical Center.

Dexamethasone Suppression Test

Procedure:

The psychiatric DST is slightly altered from the classical test for Cushing's syndrome. One mg. of dexamethasone (Decadron) is given orally at 11:30 P.M., and the next day blood specimens are obtained at 4:00 P.M. and 11:30 P.M. for determination of serum cortisol. Nonsuppression on the DST is defined[5] as a cortisol value greater than five ug/dl in either of the two blood specimens. Normally, patients should be able to suppress cortisol levels to less than five ug/dl for at least 24 to 28 hours post-dexamethasone administration: so, an elevation is indicative of loss of integrity of the HPA axis. The test can be administered to outpatients, but this will most likely require obtaining only one blood specimen at 4:00 P.M. Generally, the cortisol values obtained are in the range of 6 to 20 ug/dl and much less than those found in Cushing's patients.

Sensitivity and Specificity:

The DST has been shown to be a sensitive and specific laboratory test for the diagnosis of melancholia. In the largest sample of subjects studied to date, Carroll *et al.*[5] reported on 438 subjects who had undergone an overnight DST. Of the total subject pool, 215 were diagnosed as having endogenous depression, 153 had psychiatric diagnoses other than major depression (e.g., "neurotic" depression, mania, schizophrenia), and 70 were normal controls. They found that, among the major depressives, 67 per cent of the patients had an abnormal DST. In the non-depressed and normal groups the figure was four per cent. The authors concluded that with a one-mg. dose of dexamethasone the DST correctly diagnosed 67 per cent of the depressives, with only four per cent false positives. From a clinical standpoint it is important to note that with a positive test one could diagnose depression with essentially 100-per cent confidence, but that a negative test did not rule out depression (i.e., there were 33 per cent false negatives).

Exclusionary Criteria:

Medical factors which have been reported to have effects on the DST are summarized in Table 1. Test results in depressed patients with any of these exclusions must be interpreted cautiously by the clinician.

Clinical Applications:

In addition to its usefulness as a diagnostic test for major depression, the DST also appears to be an indicator of recovery from depressive illness,[7] an indicator of safe withdrawal from antidepressant drugs[8] and ECT,[9] and to distinguish familial subtypes of depressive illness.[10] Since nonsuppression on the DST appears to be state-dependent and returns to normal with amelioration of the depressive symptomatology, the clinician can utilize serial tests to chart the effects of somatic treatments. The clinician may be able, in fact, to predict relapse in advance of symptoms.

Use of DST at West Virginia University

Since the spring of 1980 the authors have used the DST routinely for selected inpatients with a presumptive diagnosis of depression. During that period we have obtained cortisol studies on a total of 62 patients. The findings in these patients are summarized in Table 2.

TABLE 1

Exclusionary Criteria for the Dexamethasone Suppression Test

1. False-positive tests
   - Pregnancy or high-dose estrogens
   - Cushing's syndrome
   - Malnutrition
   - Barbiturates, diphenylhydantoin
   - Uncontrolled diabetes or other major physical illness
   - Acute alcohol withdrawal
2. False-negative tests
   - Addison's disease, hypopituitarism
   - Corticosteroid therapy
   - High-dose benzodiazepines
3. Uncertain effects
   - Other endocrine diseases

TABLE 2

Dexamethasone Suppression Test in 62 Depressed Patients

Dexamethasone dose	*Patients*	*Abnormal Test*	
mg	n	n	%
1	34	20	59
2	28	5	18
Total	62	25	40

Initially, we utilized two mg. of dexamethasone, but because of the low sensitivity (18 per cent), we now routinely employ one mg. We also have been impressed by the lack of correlation between the severity of the depressive state and cortisol values. Patients with apparent mild-to-moderate depression have been among the largest secretors of cortisol, and the converse also has been true. Nonetheless, we feel it is a new and valid clinical tool for diagnosing the "masked" or "borderline" case, and for help in choosing appropriate antidepressant therapy. The following case reports demonstrate these two uses.

Case One

The patient was a 45-year-old, twice-divorced female who was admitted to the hospital from the emergency room. Her chief complaints were depression, feelings of impending loss of control, and interpersonal difficulties with her 25-year-old boyfriend. Our initial clinical impression was of a severe character disorder suffering a "situational" depression. This was confirmed by psychological testing (MMPI suggested a "borderline" personality); however, in order to rule out completely a major depression, we obtained an overnight DST. We were somewhat surprised to discover that the patient was a nonsuppressor (4:00 P.M. cortisol, 1.6 ug/dl and 11:30 P.M. cortisol, 14.0 ug/dl).

Because of the abnormal DST we elected to treat the patient with antidepressant medication. Over the next 10 days she received maprotiline (Ludiomil) up to a maximum of 125 mg. daily. Her dysphoria, immaturity and dependency diminished greatly, and her sleep and appetite improved. The day prior to discharge the DST was repeated to confirm her clinical improvement, and was in the normal range (4:00 P.M. cortisol, 0.6 ug/dl and 11:30 P.M., 1.0 ug/dl). At six weeks' follow-up the patient was free of depressive symptomatology and continued to make a good social adjustment.

Case Two

This 72-year-old widow of eight years was referred to the psychiatric inpatient unit by her local physician because of lack of energy and anhedonia over the previous month. Past history was positive for two depressive episodes, 20 and eight years before. We entertained a diagnosis of major depressive disorder, recurrent unipolar subtype. An over-night dexamethasone suppression test revealed nonsuppression with 4:00 P.M. serum cortisol of 8.5 ug/dl. We elected

to treat the patient with maprotiline to a maximum dose of 225 mg. daily.

After 21 days of antidepressant therapy, the patient's clinical status showed no change. She complained of insomnia, lethargy, weakness, and crying spells. Repeat DST at this time again revealed nonsuppression with a 4:00 P.M. cortisol of 11.2 ug/dl and an 11:30 P.M. of 14.7 ug/dl. Because of her nonresponse to maprotiline, both clinically and endocrinologically, we elected to treat the patient with electroconvulsive therapy (ECT).

She received six bilateral ECT treatments over the course of two weeks while being maintained on maprotiline 125 mg. daily. Clinical improvement was noted after treatment number four, and this paralleled positive changes in the DST (4:00 P.M. serum cortisol 5.9 ug/dl. and 11:30 P.M. cortisol 3.6 ug/dl). After six treatments, the patient was judged to be free of major depressive symptomatology. We felt comfortable with the discontinuance of ECT at this time since a fourth and final DST showed the patient's endocrine system had returned to normal (4:00 P.M. cortisol, 2.8 ug/dl, and 11:30 P.M. cortisol, 2.3 ug/dl).

The two-month follow-up of this woman showed that she had maintained her improvement.

Editor's Note: Here are generic drugs and trade names (in parentheses) to which reference is made in this manuscript: dexamethasone (Decadron, Aeroseb-Dex, Dexone, Hexadrol, and SK-Dexamethasone) and maprotiline (Ludiomil).

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Special Article

Informed Consent: The New 'Standard'

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The following article was prepared to clarify the content and effect of a recent State Supreme Court ruling in the case of Cross V. Trapp *dealing with the issue of informed consent. This subject will be developed further in continuing medical education seminars in eight outreach locations of the WVU Medical Center's Charleston Division CME Program in September, October and November; at a Charleston Area Medical Center Staff Conference on September 17, and during a physicians' program on Friday, January 21, 1983, during the Mid-Winter Clinical Conference in Charleston.*

THE West Virginia Supreme Court of Appeals, in a unanimous July 14, 1982, decision, has adopted the "patient need standard" for evaluating the question of informed consent.

The facts as outlined by the court opinion follow. The patient-plaintiff (hereinafter "plaintiff") was referred to a urologist for complaints of pain in the lower abdomen and bladder region. The plaintiff was examined by the urologist and diagnosed as having prostate gland trouble. Upon admission, the plaintiff signed a general consent form. No written consent ever was executed reflecting any specific type of treatment or surgery. The urologist-defendant conducted a cystoscopic examination and, as a result thereof, performed a transurethral resection of the prostate. Subsequently, the plaintiff testified that he was displeased that surgery had been performed; that he continued to have problems with urination, and that he allegedly became impotent.

In the resulting court complaint the plaintiff asserted that the operation was performed without proper consent and was performed negligently. The hospital, which was also named as a defendant, received a directed verdict in its favor and the case was submitted to the jury only on the question of lack of informed consent. The jury found in favor of the defendant physician. The plaintiff appealed and the Supreme Court reversed the lower court.

In adopting the "patient need standard," the Supreme Court first reviewed (1) the "reasonable physician or national standard" and (2) the "community or local practice standard." The "national standard" was defined in a cited case as "(W)here disclosures of possible results of medical or surgical procedures have been made to a patient and are ascertainable, expert medical testimony is ordinarily necessary to establish that they were insufficient to accord with disclosures made by reasonable medical practitioners under the same or like circumstances."

The "community or local practice standard" . . . "established the duty of the physician by the ordinary and reasonable disclosure practices of the average physician practicing in the same field in the same or similar communities."

Note that both of the foregoing allowed the standard to be established by expert medical testimony. However, in the case under discussion, the Court rejected both of these standards in favor of the "patient need standard."

The Court's Holding

Without re-quoting from the cases cited in arriving at its decision, the Court's holding is quoted below:

> "This Court has carefully reviewed the reasonable physician or national standard, the community or local practice standard and the patient need standard. We find the patient need standard, discussed in *Canterbury*, persuasive and the more consistent of the three standards with the fundamental principle that it is the right of every person to determine what shall be done with his or her own body. We find the patient need standard to be the standard most likely to make certain that a patient's consent to a particular method of treatment, such as surgery, was in fact, an informed consent. Unlike the patient need standard, the focus of the national and local standards of disclosure is upon the medical profession, rather than upon the patient. Respect for the patient's right of self-determination on particular therapy demands a standard

set by law for physicians rather than one which physicians may or may not impose upon themselves.

"As indicated above, a physician has a duty to disclose information to his or her patient in order that the patient may give to the physician an informed consent to a particular medical procedure such as surgery. In the case of surgery, the physician ordinarily should disclose to the patient various considerations including: (1) *the possibility of surgery*, (2) *the risks involved concerning the surgery*, (3) *alternative methods of treatment*, (4) *the risks relating to such alternative methods of treatment and* (5) *the results likely to occur if the patient remains untreated* (emphasis added). In evaluating a physician's disclosure of information to his or her patient, relative to whether that patient gave an informed consent to a particular medical procedure such as surgery, this Court hereby adopts the patient need standard, rather than physician disclosure standards based upon national or community medical disclosure practice. Pursuant to the patient need standard, the need of the patient for information material to his or her decision as to the method of treatment, such as surgery, is the standard by which the physician's duty to disclose is measured. Under the patient need standard, the disclosure issue is approached from the reasonableness of the physician's disclosure or nondisclosure in terms of what the physician knows or should know to be the patient's informational needs. Therefore, whether a particular medical risk should be disclosed by the physician to the patient under the patient need standard ordinarily depends upon the existence and materiality of that risk with respect to the patient's decision relating to medical treatment.

"It is recognized under the patient need standard that in certain situations such as an emergency where harm from failure to treat is imminent or where the physical or emotional result of disclosure could jeopardize a patient, disclosure by the physician may not be feasible. However, the burden of going forward with the evidence, pertaining to nondisclosure, rests upon the physician.

"Finally, we hold that although expert medical testimony is not required under the patient need standard to establish the scope of a physician's duty to disclose medical information to his or her patient, expert medical testimony would ordinarily be required to establish certain matters including: (1) the risks involved concerning a particular method of treatment, (2) alternative methods of treatment, (3) the risks relating to such alternative methods of treatment and (4) the results likely to occur if the patient remains untreated."

After adopting the "patient need standard," the Court further held that there must be a causal link between the patient's complaint and the lack of informed consent. In quoting from another case, the Court apparently adopted an objective standard for this determination: would a reasonable person in the patient's position have refused consent if all material risks had been disclosed? Accordingly, causality, like materiality and disclosure, is a jury question.

The Critical Issues

The two critical issues which are posed by the Court decision are: (a) What must physicians do to satisfy the "patient need" standard for disclosure; and (b) how should physicians record consent to treatment to protect themselves from claims of non-consent or uninformed consent?

Resolution of the first issue centers on the patient and the physician's duty to provide the patient with *all* material information necessary to make an informed decision. Materiality will depend on the facts and circumstances of each case. In two quoted cases, a risk of one per cent was held to be material, where a risk of .005 per cent was not material. However, do not rely on statistical probabilities as being definitive.

Regarding the issue of recording informed consent, the Court specifically stated that detailed, mechanical consent forms are not necessarily dispositive. *General consent forms, as are now commonly used, are definitely not sufficient.*

Given the specific holdings and advisements by the Court, each physician should evaluate his present practice in the area of informed consent. You must attempt to provide each patient with sufficient information which will allow him to make an intelligent, informed decision relative to the future course of his medical treatment. The information provided and the patient's decision should be recorded in detail in the patient's

record. Detailed, specific forms, containing the information required by the Court, and signed by the patient, may be helpful. These must be tailored to the individual patient. Other means, such as video tapes concerning specific procedures, viewed by the patient, may be utilized.

Remember, the question of whether informed consent was obtained or not will be answered by a jury, not by medical testimony. Evaluate your procedures in light of the new standard. Be sure that 12 reasonable minds would agree that an informed consent has been obtained.

Manuscript Information

Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be typewritten, triple-spaced, on one side only of firm (no onion skin or flimsy), standard letter sized (8 ½ by 11 in.) white paper. Wide margins (at least 1 ¼ in. on left) should be left free of typing. On the first or title page should be shown the title of the article, the name (or names) of the author, and his degrees. Pages should be numbered consecutively, the page number being shown in the right upper corner along with the surname of the author.

Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

A short abstract summarizing the manuscript should be included. This should be typed in double space on a separate page.

Authors are requested to submit a carbon copy with the original.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for reproduction should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. Cost of printing black and white photos in excess of 4 will be billed to author, and no more than 25 references will be published free of charge to the author. A legend should be provided for each illustration and, preferably, attached to it.

All scientific material appearing in *The Journal* is reviewed by the Editorial Board. Manuscripts should be mailed to The Editor, West Virginia Medical Journal, Box 1031, Charleston, W. Va. 25324.

A message from . . .

The President

HELP

As the newly installed President of the West Virginia State Medical Association, the first thing I would like to do is thank you, the Membership of the Association, for the honor and privilege of serving as your President. The next thing I would like to do is ask for your help.

This is a turbulent time for organized medicine. The leadership of the Association needs all the help it can get from the members. Too often it seems that communication has been one way—down, from the leadership to the members, with very little feedback from the members. Consequently, some of the members feel their problems have been overlooked. This should not happen, for the Association exists to serve its members.

The problems faced by a urologist in Parkersburg are not the same as those of a general surgeon in Charleston, nor of a family practitioner in Oak Hill, nor of other physicians in other parts of the state. Unfortunately, if the communication is poor, these diverse problems can never be resolved. Some problems may be almost insolvable, but with the talent and ability that are contained within the Association, I feel we definitely can attack them.

The problem list facing us is long, there is no doubt about that. Such things as governmental intervention between you and your patients, problems with third-party payors, spiraling health care costs (blamed, rightly or wrongly, on physicians), and the ever-present malpractice climate are but a few of the major problems affecting us all.

With problems, though, also come opportunities—opportunities to change the practice of medicine in our state for the better. I would like to see the Association move strongly into the legislative arena. Inattention in this area possibly has been the reason for many of our problems. In an election year, we all have more of an obligation to pay attention to the candidates and to work for the election of those we feel are qualified and will listen to our point of view. Such a year is before us, but we don't have much time.

We also have the opportunity offered by the revitalized Board of Medicine, stemming from the passage of the Association-developed Medical Practice Act of 1980. I feel the State Association should strongly support and participate in the expanded activities of this Board.

I also would like to see more participation by foreign-born physicians in the day-to-day affairs of the Association. Too often, emphasis has been placed on the differences between us and not enough on the similarities. This should be corrected. We are all physicians together in the eyes of the public and our patients.

And last, but actually most important, I would like to re-stress the theme of *communication*. The State Association stands ready to serve its members. We have channels of communication through *The Journal* and through mailings from the Association office to the membership. The members, however, also have immediate channels of communication through their Councilors and the officers individually, as well as through the Charleston office. Please, let us hear from you. If you have concerns, we need to know about them, for we can do nothing concrete without that knowledge.

I pledge personally to be available to any member of the Association at any time for any problems he or she wishes addressed, and I am sure I can speak for your other officers. We, however, can do very little without your help. We need YOUR ideas and input, YOUR enthusiasm and involvement. I would hope that together, using the talents and abilities of the whole Association, we can meet the challenges of the 80s and improve the practice of medicine and the quality of care of our patients for many years to come.

Harry Shannon MD

Harry Shannon, M. D., *President*
West Virginia State Medical Association

The West Virginia Medical Journal

Editorials

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PSYCHIATRIC TESTIMONY

So psychiatrists are at it again, disagreeing with one another in a sensational court case. "Isn't it shameful the way psychiatrists can be found to testify in disputes on whatever side is willing to put up the money?" Cluck, cluck, cluck go the tongues.

"Everyone knows that Surgeons and Internists never disagree among themselves, with one another or with Family Practitioners—what's that? How do malpractice suits manage to persist? Well, everyone knows there is a difference between discussing the technical details of a scientific pursuit and just arguing about some foolish esoteric point like whether someone is crazy or not . . . "

So goes the discussion in regard to the Hinckley verdict, within the profession and without. It seems that everyone starts out by assuming the fault lies with Medicine, in this case represented by Psychiatry.

But let's examine things just a bit. Is it really in any way remarkable that physicians can be found to testify on opposite sides in almost any diagnostic or therapeutic medical problem? Not in the least. The day there is no possibility of dispute will be the day we can all be replaced by a bank of computers backed up by a cadre of chimpanzees trained to perform rote surgical procedures.

What, then, is wrong with the way The Law handles cases typified by the Hinckley assassination attempt wherein mental competence is made an issue? The answer to that is suggested in the question itself. It is The Law which is at fault, not those who are asked to testify in the proceedings. In an imperfect state of knowledge on any subject disputants can always be found.

What is wrong is that in The Law it *does* make a difference whether or not someone was competent when he committed a criminal act. Somehow The Law has lost sight of the fact that the reason we have law number one is that the group decided that some awful thing should not be allowed to happen again. Law was invented to protect victims and potential victims, and once it stops doing that the group has no use for and thus no respect for The Law.

"Yes, but what about the constitutional rights of the individual," choruses up the response. Well, let's look at those rights. Is not each individual, among other things, a part of the general public? And who is it that will maintain that individual rights necessarily must be in conflict with the rights of the public?

It is quite possible that the rights of an individual can be maintained without granting that individual a license to break laws through finding him mentally ill.

A very wise superintendent of a state mental hospital once maintained, "Mental illness is no excuse for poor manners." Nor is it an excuse for lawlessness of any kind.

The Law itself seems to lack the sophistication to perceive the fact that mental illness of the type talked about in the Hinckley case is fairly tightly compartmentalized. This is the one observation consistently made by students of what we call schizophrenia over the centuries. It is possible to have extremely unusual ideas or attitudes on certain subjects but to be totally commonplace and unremarkable in ideas and attitudes on most other subjects.

Mentally ill people every day go about our cities obeying traffic laws, observing civilized amenities, paying their taxes and otherwise keeping the peace. It is possible and, in fact, no more difficult for them to do this than for anyone else. They should be expected and required to be as law abiding as anyone else.

Free speech and other nonviolent protests or acts of civil disobedience can be allowed to the mentally ill as individuals or as groups of individuals in the same way these rights are bestowed on the putatively "normal" citizens given to promoting a variety of unusual causes in sometimes bizarre ways. The Law, however, must

speak more loudly than those other voices in remote recesses of the head when they encourage lawlessness.

No matter the course taken by The Law to correct its own foolishness, physicians can be expected to stand up, argue, dispute with and criticize one another in any forum provided by The Law, by Medicine, or even, just by chance.

REPEAL THE LAW!

Why all the current push from the American Medical Association, the American Hospital Association and others for repeal of the National Health Planning and Resources Development Act first enacted by Congress in 1975?

Both the Reagan Administration and the Congress already have reduced substantially funding for the planning program — and some might be inclined to terminate program funding entirely. Why repeal the law itself? Won't the termination of funding have the same result?

No, it won't. Even if no funds are authorized for the national planning program, the law of the land will continue to require that states have certificate of need programs; and a state's failure to comply with the federal statute can subject it to federal sanctions in the form of loss of other federal funds.

That's why the AMA—in a position supported by the West Virginia State Medical Association —has insisted that the law needs to be repealed to clear the way for states to develop their own planning strategies suited to what they consider their own particular needs, maybe with block grant help.

There's no valid argument against some form of health planning. But the current federal statute simply has not worked. It's been the basis for a new bureaucratic morass of federal and state agencies; and it's failed to improve the nation's health care system or control health care costs.

Why have the program's direct expenditures of more than $900 million appropriated by Congress, along with even higher estimated indirect expenditures over the past seven years, not brought the planning solutions so optimistically sought? Because the program emphasis has been on cost control and not on community need, patient access and quality of care, the AMA, in particular, has insisted.

Again, there's nothing basically wrong with cost effectiveness efforts, health planning and free market competition among various health care delivery systems. The AMA has been in the forefront of many medical organizations substantially involved in a quest for rational, long-term ways to reduce the rate of health care cost increases. The West Virginia State Medical Association has been a proponent of these same objectives, and has worked through hospital staff and other mechanisms in West Virginia toward a base for such efforts.

There now is the move toward *voluntary* coalitions of medical, hospital, labor, business, insurance and other representatives to work on identification of health care cost factors, and to seek approaches to dealing with them. At least one coalition, embracing 10 West Virginia counties and four others in Ohio and Pennsylvania, has a basic project structure in place—and others are in the developmental stage.

ON THE ALERT

Statistics on bills and measures vetoed by Governors for 60-day legislative sessions dating back to 1933 provide some real food for thought. In particular, they indicate a trend which underlies the critical necessity for more year-around attention to legislative matters by groups such as physicians.

West Virginia Legislative Services found that the greatest number of bills since 1933 was the 1,820 introduced in House and Senate in 1981. In 1941, the comparable figure was 586. In the 1982 legislative session, 1,715 bills were introduced.

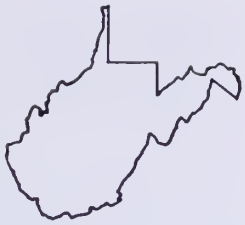
Not shown in the statistics is the significant increase, particularly in the last five or six years, of health care-related bills. It now is the rule for State Medical Association legislative representatives to monitor, prepare statements on or offer testimony on upwards of 100 bills annually.

When the measures encompass highly complex issues such as health care cost containment, the challenge to put matters in a clear and understandable light is a major one. Testimony and background information on things of this nature hardly can be put into place overnight.

Medical Association leaders have been calling in increased measure for year-around attention by committees, and by individual physicians out in practice, to issues which can be anticipated for consideration during legislative sessions, and to inform themselves of the impact such matters can have on patient care.

These calls need to be heeded. Physicians simply must be more politically and legislatively active and aware. If this sounds like the proverbial broken record, we apologize. But another legislative session is just ahead, and one thing is certain, medical and health care issues again will be raised.

GENERAL NEWS



Hepatitis Tests, Malpractice Mid-Winter Topics

Diagnostic tests in hepatitis and defense against malpractice actions will be among subjects discussed during the 16th Mid-Winter Clinical Conference next January 21-23 in Charleston.

The new Charleston Marriott Hotel, located at 309 Lee Street, East, will be the conference site.

Opening Friday afternoon, January 21, and concluding at noon on Sunday, the annual continuing medical education event again is being sponsored by the West Virginia State Medical Association and the Marshall University and West Virginia University Schools of Medicine.

Robert H. Waldman, M. D.

Robert H. Waldman, M. D., of Morgantown, WVU Professor of Medicine and Acting Dean, School of Medicine, will begin the conference with the hepatitis presentation.

"Quality Control in Medicine (Defense Against Malpractice)" will be the topic of discussion by a speaker to be announced later, and by a panel, for the Friday evening physicians' session.

In all, some 12 physicians are scheduled to speak, with other subjects to include vaccines in the treatment of hospitals; herpes; sports medicine: trauma transport; joint replacement; new developments in prenatal diagnosis; genetics-immunodeficiency diseases; pediatric nephrology; lens replacement; psychiatric drugs and antidepressants; and channel blockers.

A public session on sports medicine will be held concurrently with the physicians' session Friday evening.

Since the January, 1982, conference has come the resignation from the Program Committee of Dr. Ralph H. Nestmann of Charleston, a Committee member and Co-Chairman since the first conference in 1968 (see accompanying story).

Named a new member of the Program Committee was Dr. Richard G. Starr, Beckley internist.

Other members are Drs. Joseph T. Skaggs, Chairman, William O. McMillan, Jr., and C. Carl Tully, all of Charleston; Maurice A. Mufson, Huntington; and Robert L. Smith, Morgantown.

Doctor Waldman was appointed Acting Dean of the WVU School of Medicine last April, succeeding Dr. John E. Jones, who became WVU Vice President for Health Sciences.

Doctor Waldman joined the WVU faculty as Chairperson of Medicine in 1976 after having served as Associate and Acting Chairperson of the Department of Medicine at the University of Florida College of Medicine.

A native of Dallas, he received his bachelor's degree from Rice University and his M. D. from Washington University Medical School in St.

Doctor Nestmann Resigns Committee Post

Dr. Ralph H. Nestmann of Charleston, member and Co-Chairman of the Program Committee for the Mid-Winter Clinical Conference since the first conference almost 16 years ago, has resigned.

Doctor Nestmann, an internist, cited the press of other duties, also commenting that he believed it was "time to step down."

Officers and staff members of the State Medical Association, the primary sponsor of the Mid-Winter Clinical Conference, are among those who have expressed their appreciation to Doctor Nestmann for his pioneering role in continuing medical education in the state.

The first conference was a small Sunday afternoon chest program in Charleston.

Louis. He did his residency in internal medicine at Johns Hopkins.

The Program Committee is receiving continuing assistance from WVU Charleston Division staff members J. Zeb. Wright, Ph.D., Coordinator of Continuing Education, Department of Community Medicine; and Sharon A. Hall, Conference Coordinator.

More details as to specific subjects and speakers will be provided by the Program Committee in upcoming issues of *The Journal.*

Medicine, Surgery Program Planned By Clinic

Update '82, a two-day program in medicine and surgery, will be held by the Wheeling Clinic October 2-3 at the Sheraton Inn in St. Clairsville, Ohio.

A guest faculty of eight physicians will join 11 Wheeling Clinic doctors on the faculty for the conference, which will begin Saturday morning, October 2, and continue through 12:30 P. M. Sunday.

Some 19 scientific presentations plus related workshops, films and other activities are scheduled.

The guest faculty will include Drs. Anthony DiBartolomeo, Chief, Section of Rheumatology and Professor of Medicine, West Virginia University, Morgantown; Jeffrey Ferst, Assistant Professor of Medicine, St. Louis University Medical Center; Donald Louria, Chairman, Department of Preventive Medicine and Community Health, New Jersey College of Medicine; Lester Persky, University Hospital of Cleveland; Marc Pohl, Program Director, Department of Hypertension and Nephrology, Cleveland Clinic;

Charles Reynolds, Medical Director, Sleep Evaluation Center, Western Psychiatric Institute and Clinic, Pittsburgh; Alvin P. Shapiro, Professor of Medicine, University of Pittsburgh, and Manuel Tzagournis, Professor of Medicine and Medical Director, Ohio State University.

Cleveland Surgeon to Lecture

Dr. Robert D. Stewart, orthopedic surgeon affiliated with St. Vincent's Charity Hospital in Cleveland, will deliver the Fulton Memorial Lecture Saturday afternoon.

Special guest speaker for the Saturday evening banquet will be Phil Jones of Chevy Chase, Maryland, Washington Correspondent for CBS News.

Registration is limited to 150 physicians. The program has been approved for 12 hours of credit in Category 1 of the Physician's Recognition Award of the American Medical Association; and also is approved for 12 hours of Prescribed Credit by the American Academy of Family Physicians.

For registration and other information, contact the Wheeling Clinic. Telephone (304) 232-3600.

Shown above are officers of the West Virginia Chapter, American College of Surgeons, during the group's meeting last spring at the Greenbrier in White Sulphur Springs. In the first row, from left, are Drs. James A. Coil, Huntington, Councilor; Benjamin L. Plybon, Ronceverte, Councilor; Roger E. King, Morgantown, Second Vice President; Catalino B. Mendoza, Jr., Clarksburg, First Vice President, and Stanley J. Kandzari, Morgantown, President Elect; second row, from left, Drs. Clemente C. Diaz, Richwood, Councilor; Robert L. Bradley, Huntington, Councilor; Alvin L. Watne, Morgantown, Secretary/Treasurer; William E. Gilmore, Parkersburg, President, and Herbert G. Dickie, Jr., Wheeling, Governor.

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1982, as compiled by Dr. Robert L. Smith, Assistant Dean for Continuing Education, and J. Zeb. Wright, Ph. D., Coordinator, Continuing Education, Department of Community Medicine, Charleston Division. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of The Journal.)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Morgantown, Charleston and Wheeling campuses. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, 3110 MacCorkle Avenue, S. E., Charleston 25304; Office of Continuing Medical Education, WVU Medical Center, Morgantown 26506; or Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

Sept. 11, Oklahoma City, OK, Trauma (prior to WVU-Oklahoma football game)

The schedule of CME topics for the Saturday morning football weekend sessions to be presented at the WVU Medical Center in Morgantown (with the football game designated in parentheses) is as follows:

Sept. 18 (Maryland), Carcinoma of the Esophagus, Pulmonary Trauma (final day, annual meeting of WV Chapter, American College of Surgeons)

Sept. 25 (Richmond), Internal Medicine Topics of General Interest to Physicians (final day of Annual Internal Medicine Days)

Oct. 9 (Boston College-Homecoming), Follow-up of Abnormal Pap Smear. Helping Parents Cope with Perinatal Death. Sexuality and Pregnancy (final day of OB/GYN Teaching Days)

Oct. 23 (Penn State), Orthopedics for the Family Practitioner (final day of 8th Annual Hal Wanger Family Practice Conference)

Oct. 30 (East Carolina), Trigeminal Neuralgia, Maxillofacial Injuries, Common Skin Diseases

Nov. 20 (Syracuse), Sports Medicine Topics (final day of 3rd Annual Sports Medicine Symposium)

For your planning, following is a list of the conferences associated with the Football Weekend Continuing Medical Education offerings:

Sept. 17-18, WVU Chapter of the American College of Surgeons

Sept. 24-25, Internal Medicine Days

Oct. 8-9, OB/GYN Teaching Days

Oct. 21-23, 8th Annual Hal Wanger Family Practice Conference

Nov. 19-20, 3rd Annual Sports Medicine Symposium

Sept. 30-Oct. 1, Morgantown, Current Controversies in Total Knee Replacement

Oct. 16, Charleston, Occupational Health 1982

Oct. 21, Charleston, Violence in the Clinical Setting

Nov. 5-6, Morgantown, Diagnostic Ultrasound Update

Nov. 5-6, Morgantown, Suspected Brain Damage: An Introduction to Early Intervention

Nov. 8., Charleston, Pastoral Care

Regularly Scheduled Continuing Education Outreach Programs from WVU Medical Center/ Charleston Division

Buckhannon, St. Joseph's Hospital, 3rd floor, 3rd Thursday, 7-9 P. M.—Sept. 16, "Anxiety: The Therapeutic Dilemma," Donald Robinson, M. D.

Oct. 21, "Quality Control/Medical Malpractice in WV" (a special program in cooperation with the WV State Medical Assn.), Joseph Skaggs, M. D., Fred Bockstahler, J. D., and Tom Auman, M. Ed.

Cabin Creek, Cabin Creek Medical Center, Dawes, 2nd Wednesday, 8-10 A. M.—Sept. 8, "Quality Control/Medical Malpractice in WV" (a special program in cooperation with the WV State Medical Assn.), Mabel Stevenson, M. D., John S. Haight, J. D., or Don R. Sensabaugh, J. D., and Tom Auman, M. Ed.

(continued on next page)

Oct. 13, "Pediatric Rheumatology," John W. Byrd, M. D.

Nov. 10, "Evaluation & Treatment of Depression," Sidney Lerfald, M. D.

Gassaway, Braxton Co. Memorial Hospital, 1st Wednesday, 7-9 P. M.—Sept. 1, "Quality Control/Medical Malpractice in WV" (a special program in cooperation with the WV State Medical Assn.), Richard G. Starr, M. D.; John S. Haight, J. D., or Don. R. Sensabaugh, J. D., and Tom Auman, M. Ed.

Oct. 6, "Sudden Infant Death Syndrome: Implications for Rural Practitioners," David Z. Myerberg, M. D.

Madison, Allied Health Room, Boone Career Center, West Madison, 2nd Tuesday, 7-9 P. M. —Sept. 14, "Quality Control/Medical Malpractice in WV" (a special program in cooperation with the WV State Medical Assn.), Thomas Potterfield, M. D.; John S. Haight, J. D., or Don. R. Sensabaugh, J. D., and Tom Auman, M. Ed.

Oct. 12, "Pulmonary Function Evaluation" (speaker to be announced)

Oak Hill, Oak Hill High School (Oyler Exit, N 19) 4th Tuesday, 7-9 P. M.—Sept. 28, "Quality Control/Medical Malpractice in WV" (a special program in cooperation with the WV State Medical Assn.), Joseph Skaggs, M. D.; John S. Haight, J. D., or Don. R. Sensabaugh, J. D., and Tom Auman, M. Ed.

Oct. 26, "Approach to the Peripheral Vascular Patient," Robert Leadbetter, M. D.

Welch, Stevens Clinic Hospital, 3rd Wednesday, 11 A. M.-1 P. M. — Sept. 15, "Questions & Answers: Cardiology," Stafford Warren, M. D.

Oct. 20, "Sudden Infant Death Syndrome: Implications for Rural Practitioners," David Z. Myerberg, M. D.

Nov. 17, "Quality Control/Medical Malpractice in WV" (a special program in cooperation with the WV State Medical Assn.), Thomas Potterfield, M. D.; Fred Bockstahler, J. D., and Tom Auman, M. Ed.

Whitesville, Raleigh-Boone Medical Center, 4th Wednesday, 11 A. M.-1 P. M.—Sept. 22, "Quality Control/Medical Malpractice in WV" (a special program in cooperation with the WV State Medical Assn.), Carl Adkins, M. D.; Fred Bockstahler, J. D., and Tom Auman, M. Ed.

Oct. 27, "Renal Deficiencies" (speaker to be announced)

Williamson, Appalachian Power Auditorium, 1st Thursday, 6:30-8:30 P. M.—Sept. 2, "Quality Control/Medical Malpractice in WV" (a special program in cooperation with the WV State Medical Assn.), Thomas G. Folsom, M. D.; John S. Haight, J. D., or Don. R. Sensabaugh, J. D., and Tom Auman, M. Ed.

Oct. 7, "Sudden Infant Death Syndrome: Implications for Rural Practitioners," David Z. Myerberg, M. D.

Marshall Enrolls Largest Entering Class Of 48

The Marshall University School of Medicine recently released the names of the students in its largest entering class.

The class, which began its studies on August 30, is composed of 48 students, including 45 West Virginians, two Lawrence County, Ohio, residents, and one from Lawrence County, Kentucky.

In July, the school received approval from the Liaison Committee for Medical Education (LCME) to increase the size of the entering class from 36 to 48 students. At the same time, the LCME continued the school's accreditation for four years.

Nineteen West Virginia counties are represented among the fall entering class members. Kanawha County, with seven students accepted, is second only to Cabell, which has 16 Huntington-area students.

The school received 485 applications from would-be medical students, of whom 293 were non-residents, according to Cindy Chapman, MU Admissions Officer. The Admissions Committee interviewed 208 of the applicants, including 24 non-residents, for the 48 seats in the entering class, Mrs. Chapman said.

The new class has an over-all grade point average of 3.5 and 3.5 grade point average in science, matching both the national and state norms, according to her statistics. The average age of class members is 24.9 years. Twenty-seven per cent of the class members are women.

15 Attended Marshall

Fifteen of the students attended Marshall University, while 10 studied at West Virginia University. Other West Virginia schools represented include: Salem College, Alderson-Broaddus

College, West Virginia Institute of Technology, Concord College, West Virginia State College, and University of Charleston.

Schools attended outside of West Virginia include: Harvard University, Duke University, Michigan State University, Wake Forest University, University of Connecticut, University of Pittsburgh, Georgia Institute of Technology, University of Cincinnati, University of South Alabama, St. Louis University and Arizona State University.

A list of students in alphabetical order by county follows:

BERKELEY—Jackson L. Flanigan, Martinsburg; BOONE—Thomas Michael Lewis, Barrett, and Scott E. Miller, Madison; BROOKE—Monica L. Richey, Wellsburg; CABELL—Craige M. Brestel, Patricia A. Carroll, Timothy A. Damron, William H. Haney, John A. Hoffman, Edwin J. Humphrey IV, Eric W. Janssen, David M. Josephs, Kelly S. Kearfott, Katrina L. Kearfott, Kathleen M. O'Hanlon, Stuart M. Roth, Mark A. Studeny, Larry W. Watson and Mark E. Wippel, all of Huntington, and John A. Purcell, Barboursville;

GREENBRIER—Donald H. Trainor, Jr., Williamsburg; HANCOCK—Joseph C. Capito, Weirton; HARDY—Jerry M. Hahn, Wardensville; HARRISON—Frank W. Sabatelli, Clarksburg; KANAWHA—William M. Comisky, Kenneth F. McNeil, Elizabeth L. Spangler, and Sue E. Wegmann, all of Charleston; Kimberly F. Ewing and Marian Jean Gorham, South Charleston, and James W. Lowery, Jr., Alum Creek; LINCOLN—Susann L. Lovejoy, Yawkey, and Terrence W. Triplett, West Hamlin; MARION—Patrick J. Esposito, Fairmont;

MARSHALL—David S. Parks, Moundsville; MONONGALIA—Mary Nan Spiker, Morgantown; OHIO—Elaine L. Flanders and Joanne M. Lebow, Wheeling; PUTNAM—William R. Brooks, Winfield; RALEIGH—Ted W. Solari and Donna J. Slayton, Beckley; TAYLOR—Nancy L. Craig, Grafton; WAYNE—Marc A. Workman, Fort Gay, and Elaine Matthews Young, Wayne; WOOD—Stevan J. Milhoan, Vienna; LAWRENCE (KENTUCKY)—Catherine Anne Steele, Louisa, and LAWRENCE (OHIO)—David S. Ratliff, Ironton, and James E. Toblin, Proctorville.

Review A Book

The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal*, Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication.

Current Pediatric Diagnosis & Treatment, 7th Edition, by C. Henry Kempe, M. D.; Henry K. Silver, M. D., and Donough O'Brien, M. D. 1,106 pages. Price $26. Lange Medical Publications, Los Altos, California 94022. 1982.

Review of Medical Microbiology, 15th Edition, by Ernest Jawetz, M. D., Ph.D.; Joseph L. Melnick, Ph.D.; and Edward A. Adelberg, Ph.D. 553 pages. Price $17. Lange Medical Publications, Los Altos, California 94022. 1982.

Basic and Clinical Immunology, Fourth Edition, by Daniel P. Stites, M. D.; John D. Stobo, M. D.; H. Hugh Fudenberg, M. D.; and J. Vivian Wells, M. D. 775 pages. Price $22. Lange Medical Publications, Los Altos, California 94022. 1982.

Association Joins Sponsors For Liability Discussions

The State Medical Association is joining with the continuing medical education outreach program offered by the West Virginia University Medical Center's Charleston Division, and others, in offering a series of eight programs on quality assurance and medical malpractice problems in September, October and November.

The schedule of these programs, and speakers, can be found in the "Continuing Education Activities" column elsewhere in this copy of *The Journal* (also see related special article on page 229 by Robert F. Bible, the Association's Staff Counsel).

The program, featuring speakers from the medical, legal and insurance areas, are set for outreach centers in Gassaway, Williamson, Dawes (Kanawha County), Madison, Whitesville, Oak Hill, Buckhannon and Welch, and will carry Category 1 credit toward the American Medical Association's Physician's Recognition Award.

The Association also will participate in a September 17 medical staff conference at the Charleston Area Medical Center on the general topic of informed consent and a review of the malpractice picture.

Marshall-Hospital Affiliation Agreement Announced

A resource affiliation agreement between Marshall University's School of Medicine and Huntington State Hospital to assist in developing model patient care programs at the hospital recently was announced by School of Medicine Dean Robert W. Coon, M. D., and West Virginia Health Department Director L. Clark Hansbarger, M. D.

"The basic philosophy behind the affiliation is to develop a relationship similar to that existing between the school and the [Huntington] VA Medical Center which involves a sharing of resources and assistance in developing quality patient care programs," Doctor Coon said.

"One of the very first goals will be to bring the hospital up to the standards of the Joint Commission for Accreditation of Hospitals (JCAH) which will improve our care and at the same time open up opportunities for medical education programs for residents and medical students," said Dr. Raymond R. Watson, Clinical Director of the new program.

Welfare Moves To Adopt Uniform Billing Form

The West Virginia Department of Welfare has completed its testing with selected providers of the HCFA-1500, the Universal Billing Form, and has described the results as "very favorable."

As a result of this successful test phase, the Department will announce in the near future, via individual mailings to those who normally would utilize the HCFA-1500, its plans for allowing the total provider community to use it in submitting billings for payment for medical services under welfare agency programs.

It is planned to run compatible systems so that those who wish to continue billing for a period of time on the old PSI form can do so, along with those who wish to use the HCFA-1500.

Training sessions will be announced in the mailings, along with the beginning date for billing on the HCFA-1500.

Most billing offices are familiar with the HCFA-1500, but since there are a few deviations from the billing instructions on the reverse side of the HCFA-1500, it was felt that group training sessions, of a short duration, are in order.

Hemophilia Conference At WVU Scheduled October 16

Speakers from North Carolina, Pennsylvania and New York will compose the faculty for the first annual conference on Hemophilia October 16 in Morgantown.

The meeting site will be the WVU Medical Center.

Sponsors are the West Virginia Statewide Hemophilia Program; WVU; and Hyland Therapeutics Division, Travenal Lab, Inc.

The speakers will be Kenneth M. Brinkhous, M. D., Alumni Distinguished Professor of Pathology, Emeritus, University of North Carolina; Edward Carrai, M.Ed., Educational-Vocational Counselor; M. Elaine Eyster, M. D., Professor of Medicine and Chief, Division of Hematology, and James O. Ballard, M. D., Assistant Professor of Medicine, all from the Milton S. Hershey (Pennsylvania) Medical Center; Marvin S. Gilbert, M. D., Associate Clinical Professor of Orthopedics, Mount Sinai School of Medicine, New York City; Jessica H. Lewis, M. D., Professor of Medicine, University of Pittsburgh, and Catherine Plotnicov, M. S., Pittsburgh.

For additional information, call the WVU Section of Hematology/Oncology at (304) 293-4229/2519.

State Emergency Conference At Canaan Valley Park

The sixth annual Governor's Conference on Emergency Medical Services will be held at Canaan Valley State Park in Davis September 29-October 1.

The program has been planned for physicians and everyone involved in providing emergency care in West Virginia.

The Advanced Cardiac Life Support (ACLS) provider course will be offered.

Other conference subjects to be covered will be Department of Transportation Dispatcher Training Program; care of emergency vehicles; Sudden Infant Death Syndrome (SIDS) Project; billing procedures; care and management of the newborn; use of the Management Information System; rape/domestic violence; burn-out of EMS personnel; child abuse; and training requirements for ambulance personnel.

The general registration fee is $30; ACLS Course registration fee for physicians, $100.

The latter includes attitude adjustment seminar; conference luncheon; one ACLS Provider Manual, and two lunches (Wednesday and Friday).

For additional information, contact the Office of Emergency Medical Services, West Virginia Department of Health, at (304) 348-3956.

Schedule Of SIDS Programs In State Announced

A special Sudden Infant Death Syndrone (SIDS) Information and Counseling Project has been established at the West Virginia University Medical Center in Morgantown. Primary objectives of the project, according to Director David Z. Myerberg, M. D., are to encourage a more sensitive approach to family counseling and to enhance compliance to reporting procedures.

Additionally, Doctor Myerberg, in cooperation with the Continuing Education Outreach Program of the WVU Medical Center/Charleston Division, will conduct a number of two-hour programs on "SIDS: Implications for Rural Practitioners" for physicians and other health professionals.

Program schedule for 1982 include:

Gassaway, October 6, 7:00-9:00 P. M., Braxton County Memorial Hospital

Williamson, October 7, 6:30-8:30 P. M., Appalachian Power Auditorium

Welch, October 20, 11:00 A. M.-1:00 P. M., Stevens Clinic Hospital

Additional programs will be conducted on September 21 in Martinsburg, October 5 in Glen Dale, and December 15 in Fairmont.

For further information, contact Kathy Hopkins, R.N., SIDS Project Coordinator, Morgantown (293-4451), or J. Zeb. Wright, Ph.D., Charleston Division (347-1243).

Occupational Health Topic For October Meeting

"Occupational Health 1982" will be the title of a conference to be held on October 16 at the West Virginia University Medical Education Building Auditorium in Charleston.

Faculty members for the course, scheduled from 8 A. M. to 1:30 P. M., will include Dr. Bruce Karrh, Medical Director, E. I. DuPont de Nemours & Company; Dr. T. A. Lincoln, Medical Director, and A. G. Voress, Manager, Occupational Health, Union Carbide Corporation; Dr. John Thomas, WVU Professor of Pharmacology; Dr. B. H. Avasia, Medical Director, Institute Plant, Union Carbide Corporation; Dr. Thomas Hodous, Assistant Clinical Section Chief, Division of Respiratory Disease, National Institute of Occupational Safety and Health (NIOSH), Morgantown;

Dr. R. G. Rowe, Medical Director, South Charleston Technical Center, Union Carbide Corporation; Jerry Beaumont, B. S., C.I.H., Industrial Hygienist, FMC Corporation, South Charleston; Merle E. Mahler, Superintendent, Personnel Division, Monsanto Corporation, Nitro, and Dr. James Melius, Chief, Hazard Evaluation and Technical Assistance Branch, NIOSH, Cincinnati.

The conference has been approved for four and one-half hours of credit in Category 1 of the Physician's Recognition Award of the American Medical Association.

For additional information, telephone Doctor Avashia at (304) 747-6135.

Doctor Traubert Nominated For ABFP Board Post

Dr. John W. Traubert of Morgantown has been nominated for election to the Board of Directors of the American Board of Family Practice (ABFP).

Doctor Traubert, Chairman of the Department of Family Practice, West Virginia University School of Medicine, is one of six family physicians nominated by the American Academy of Family Physicians (AAFP) for the Academy position on the ABFP Board.

The six nominees will be presented to the AAFP Congress of Delegates during its meeting October 2-4 in San Francisco, preceding the 34th annual AAFP scientific assembly there October 4-7, for election of three finalists.

A screening committee composed of chairmen of the AAFP's six standing commissions selected the nominees during the AAFP Board of Directors meeting last June in Salishan, Oregon.

The other five family physicians nominated are Drs. Loren H. Amundson, Sioux Falls, South Dakota; Ross L. Egger, Daleville, Indiana; T. Riley Lumpkin, Tuscaloosa, Alabama; Sam A. Nixon, Houston, Texas, and Erick Reeber, Bagley, Minnesota.

The screening committee selected the six nominees on the basis that they have demonstrated leadership and understanding of the philosophy of family practice, and that their medical experience includes a substantial amount of clinical experience in family practice.

Lifetime Care AAFP Theme For October Meeting

More than 4,000 family physicians will convene October 4-7 at San Francisco's Moscone Convention Center for the 34th annual scientific assembly of the American Academy of Family Physicians (AAFP).

This year's theme, "Family Practice: Care for a Lifetime," calls attention to continuing, comprehensive health care that family physicians deliver.

A panel discussion, "Insight on the Problem of Denial in Alcoholism," featuring actor Jason Robards, will kick off the scientific program at 1:30 P.M. Monday, October 5, at Moscone Center. Robards, a recovered alcoholic, will set the stage for the clinical discussion by performing the monologue from Eugene O'Neill's "The Iceman Cometh." The panel will include Robards, psychiatrists and staff members from the Mayo Clinic, as well as a family physician.

This year's program offers 10 education activities and more than 100 practical topics specifically designed to acquaint family physicians with the latest medical advances.

Other highlights include talks on marriage counseling, substance abuse of the 80s, family center maternity care, diabetes and dermatology.

The Congress of Delegates, governing body of the 53,000-plus member AAFP, will convene prior to the Assembly to conduct official business.

Dr. Gerald R. Gehringer of New Orleans will be installed as President.

Nuclear War Symposium Set In Pittsburgh

A symposium, "Roots and Realities of Nuclear War: Medical and Related Consequences," will be held on October 9 in Pittsburgh.

The meeting site will be Benedum Hall Auditorium, University of Pittsburgh.

Co-sponsors are the Morgantown (West Virginia) and Akron-Canton-Kent (Ohio) chapters of Physicians for Social Responsibility.

The meeting is certified for six hours of credit in Category 1 of the Physician's Recognition Award of the American Medical Association; and for 0.6 CEUs by the University of Pittsburgh School of Medicine.

For additional information, contact the School's Division of Continuing Education at (412) 624-2653.

Medical Meetings

Sept. 9-11—Peripheral Vascular Disease Symposium (Saint Anthony Hospital), Columbus, OH.

Sept. 15-17—WV Public Health Assn., Parkersburg.

Sept. 17-18—WV Chapter, Am. College of Surgeons, Morgantown.

Sept. 17-18—WV Section, ACOG & NAACOG, Wheeling.

Sept. 20-23—Am. College of Radiol., Boston.

Sept. 23 — Infectious Disease Day (Wheeling Area CME Program—Ohio Valley Medical Center, Wheeling Hospital), Wheeling.

Sept. 25-26—Asthma 1980s (St. Charles Hospital, Oregon, OH, & Milton S. Hershey Med. Center, PA State U.), Hershey, PA.

Sept. 29-Oct. 1—Governor's Conference on Emergency Medical Services, Canaan Valley State Park.

Sept. 30 - Oct. 2 — Women's Health Conference (WVU), Morgantown.

Sept. 30-Oct. 3—ASIM, Chicago.

Oct. 2-3—Update '82 (Wheeling Clinic CME Program), St. Clairsville, OH.

Oct. 4-7—AAFP, San Francisco.

Oct. 15-17—Med. Society of the District of Columbia, White Sulphur Springs.

Oct. 16—Hemophilia Conference, Morgantown.

Oct. 22-24—PA Med. Society, Philadelphia.

Oct. 23-28—Am. Academy of Pediatrics, New York City.

Oct. 24-29—Am. College of Surgeons, Chicago.

Oct. 24-30—Am. College of Gastroenterology, New York City.

Oct. 30-Nov. 2—Southern Med. Assn., Atlanta.

Nov. 10-14—Med. Society of VA, Williamsburg.

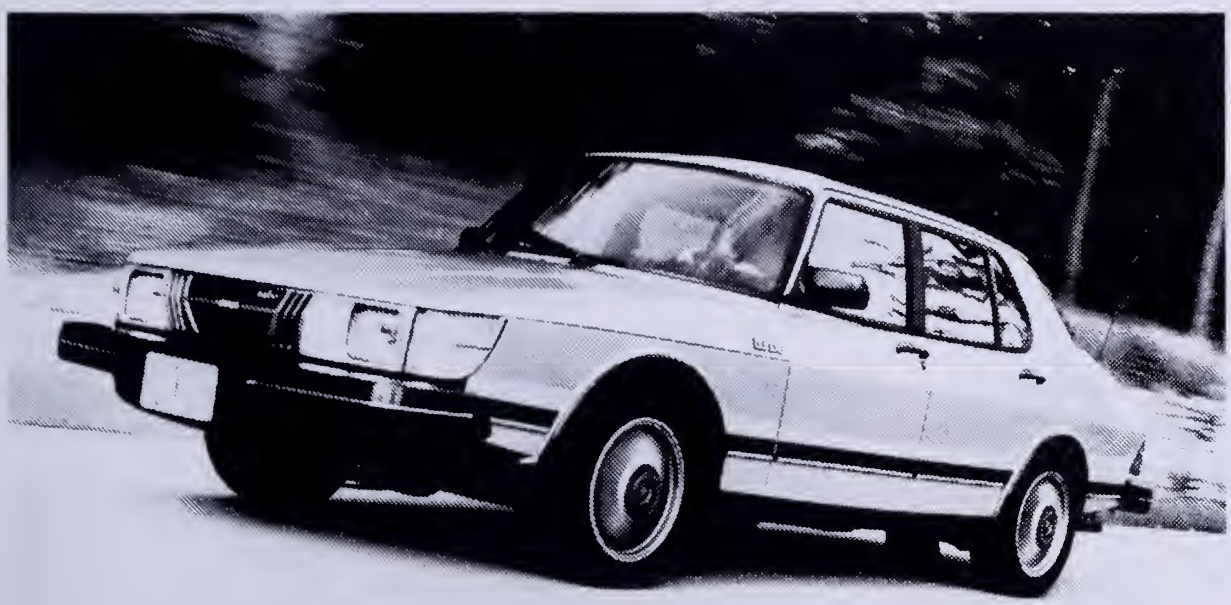
Nov. 18—Diabetes Update (Wheeling Hospital, Ohio Valley Medical Center), Wheeling.

Dec. 5-8 — Interim Meeting, AMA House, Miami Beach.

1983

Jan. 21-23—16th Mid-Winter Clinical Conference, Charleston.

April 15-17—WV Chapter, AAFP, Morgantown.



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WVU Medical Center –News–

Compiled from material furnished by the Medical Center News Service, Morgantown, W. Va.

Cardiac Rehab Program In Final Phase

The third and final phase of the cardiac rehabilitation program designed to build and maintain physical fitness in heart attack victims will begin in September at WVU.

The program is a cooperative effort between the School of Medicine's Section of Cardiology and Division of Physical Therapy and the School of Physical Education's Department of Sports and Exercise Studies.

Phase one and two of the rehabilitation program are based within University Hospital. Phase one emphasizes patient and family education and bedside exercises while the patient is hospitalized. Phase two is a supervised and monitored exercise program for outpatients. The newly-initiated phase is a long-range exercise program.

All stable post-heart attack patients who are referred with proper medical documentation by their physicians are eligible to participate in phase three.

Other high-risk patients such as those with high blood pressure or other cardiovascular problems, or those needing pulmonary exercise or on weight reduction programs, also may enroll following medical evaluation and referral by their physicians.

Rachel A. Yeater, Associate Professor of Physical Education and Supervisor of the Human Performance Laboratory, is Director of the phase-three program.

She said three sessions of about one hour each will be held weekly in the Coliseum. The fee is $40 a month or $150 for a semester.

"We will begin with a stretching program and then include some type of aerobic program such as walking, swimming or bicycle riding," Doctor Yeater stated.

Charles A. Meacci, Associate Professor of Physical Therapy and Director of Physical Therapy Service for University Hospital, said most patients would enter the program three months following their heart attack. These patients have been monitored closely, tested carefully, and are ready for the final phase.

Doctor Meacci and John J. Petronis, Associate Professor of Physical Therapy, are coordinating phases one and two with the new program.

Unlike the first two phases, phase three has no time limit, and patients may continue in the program indefinitely. All three programs emphasize behavior modification including cessation of smoking, proper diet and weight control, body relaxation, and reduction of fear and stress.

New Alcoholic Unit Using Different Approach

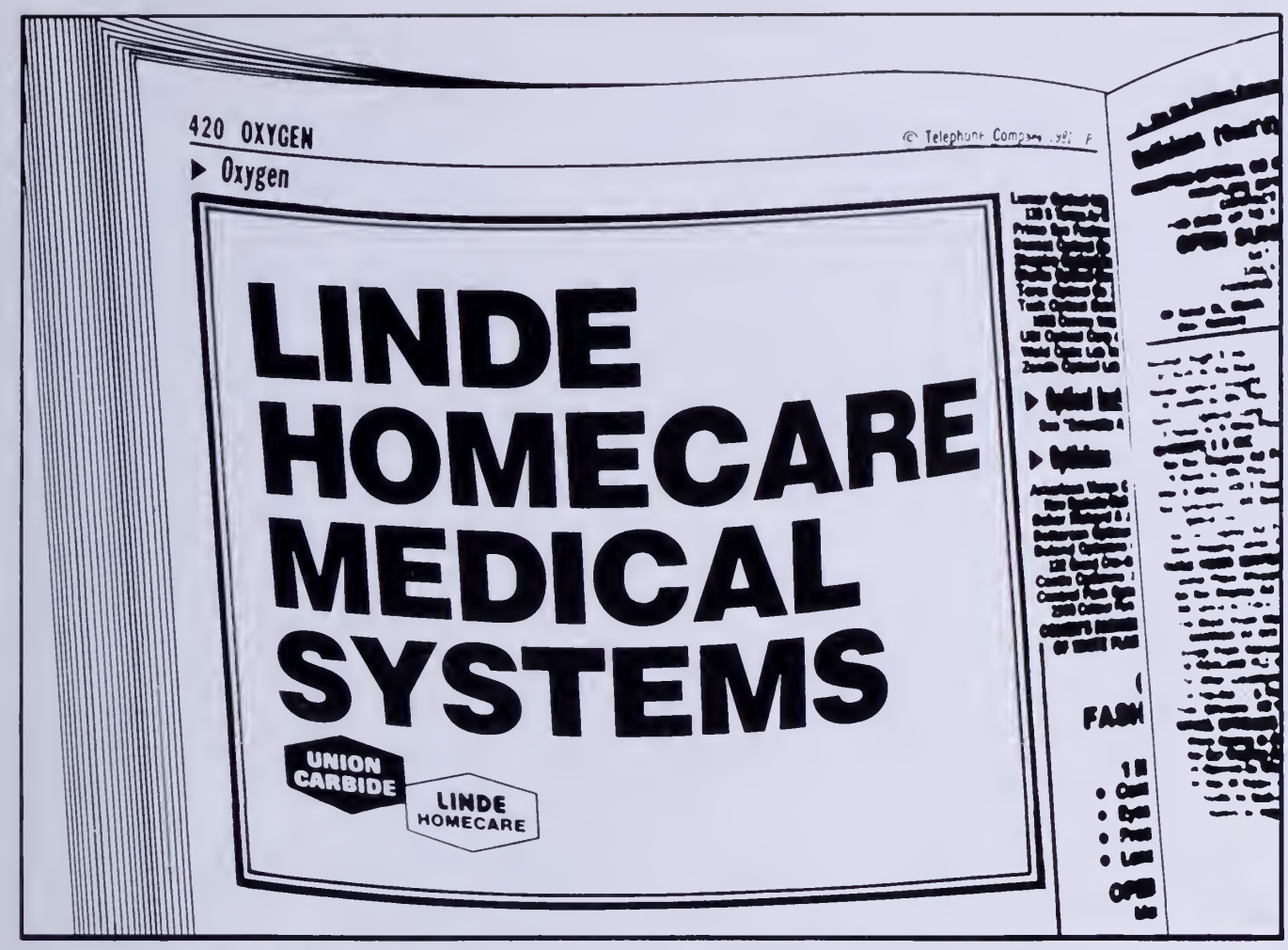
WVU Medical Center has established a clearly defined educational and service program devoted exclusively to the treatment of chronic alcoholism and the physical, mental and social problems associated with alcohol abuse.

Although the Alcoholic Recovery Unit has only six beds, its Director, Tom H. Pepper, M. D., believes it will provide a valuable learning experience for medical students, residents and other health science workers.

Doctor Pepper is Associate Professor of Behavioral Medicine and Psychiatry. Edmund B. Flink, M. D., Benedum Professor of Medicine, is Co-Director of the unit. Doctor Flink is an international authority on alcohol metabolism.

"We're trying to inculcate the notion that alcoholics are salvageable," Doctor Pepper said. "They're responsive. They're exciting to work with and they're grateful. This is regarded as almost mindless optimism among some of my colleagues."

Hospitals often treat medical problems arising from alcoholism without providing adequate follow-up therapy for the basic illness, Doctor Pepper explained.



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Third-Party News, Views and Program Concerns

Court Holds Panels Subject To Antitrust Laws

Maintaining a hard-line policy on "antitrust and health," the U. S. Supreme Court has held (6-3) that peer review panels for health insurance claims evaluation are subject to attack under the federal antitrust laws.

The case at hand involved a New York chiropractor who challenged a chiropractic review panel for Union Labor Life Insurance Co., whose health insurance policies contain some chiropractic benefits. The chiropractor, some of whose claims were disputed by the review panel, brought suit charging that the review group was a vehicle for a conspiracy to fix prices of chiropractors.

The high court's decision, which obviously applies to all such peer review groups including those composed of physicians, centered on the important legal question of whether the activities of these review committees can be considered part of the business of insurance. The majority of the court held that it was not part of the business of insurance, and thus not exempt from the scope of the federal antitrust laws.

In their dissent, Justices Rehnquist, O'Connor and Chief Justice Burger said "there can be little doubt that today's decision will vastly curtail the peer review process. Few professionals or companies will be willing to expose themselves to possible antitrust liability through such activity."

AMA Protests HMO Grant Repayment Waivers

The American Medical Association has protested a proposed regulation that would allow Health Maintenance Organizations (HMOs) to be forgiven repayment of federal grants despite changing from non-profit to for-profit HMOs.

"To amend these regulations now and allow profit-making entities to take advantage of the public funds received by the not-for-profit HMO is highly inappropriate," the AMA told the U. S. Health and Human Services Department.

The regulation would give the HHS Secretary authority to waive all or part of the grant repayment in such cases.

The AMA told the HHS Department that "federal government intervention, particularly in the promotion of HMOs, has interfered with the operation of a pluralistic system for consumer choice."

To waive the repayment requirement would be "but another example of preferential treatment being given to HMOs by the federal government," said the AMA.

Profession's Impaired Doctor Programs Serve As Model

Impaired physician programs may serve as a model for other professions and occupations that seek to deal with members who suffer from alcoholism and other forms of drug dependence, the American Medical Association has told Congress.

William Rial, M. D., AMA President, informed a Senate Labor and Human Resources Subcommittee that the medical profession was one of the first professions to confront the fact that some of its members suffered impairments, and was the first to take action to deal with the problem.

With the active encouragement of the AMA, medical societies in all states have established programs to attempt early identification and treatment for impaired physicians, Doctor Rial testified.

Doctor Rial was accompanied by LeClair Bissell, M. D., a member of the AMA Panel on Physician Mortality and the AMA Panel on Alcoholism.

The physicians pointed to "a high recovery rate by physicians who undergo treatment as part of the program," in the range of two-thirds to three-fourths of the participants.

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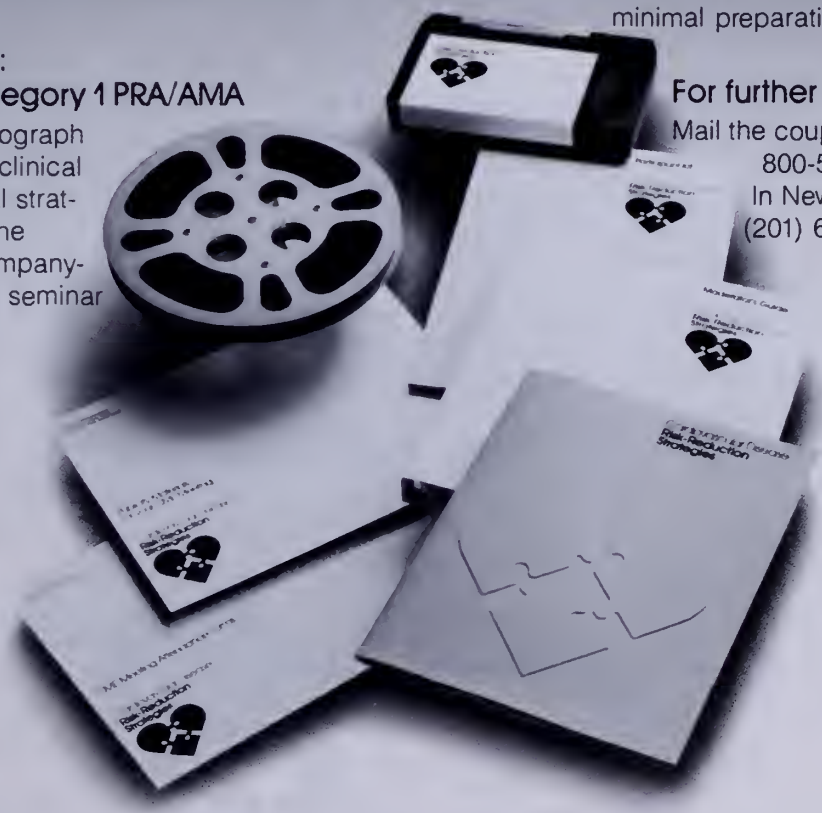

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Obituaries

WILLIAM P. BITTINGER, M. D.

Dr. William P. Bittinger of Oak Hill, a retired general practitioner, died on July 18 in a Johnson City, Tennessee, hospital. He was 84.

Doctor Bittinger was a former member of the State Medical Association's Council, and Chairman of the Association's Committee on Aging in 1967-68. He was a member of the former Medical Licensing Board of West Virginia from 1949 to 1959.

Doctor Bittinger received his M. D. degree in 1924 from the Medical College of Virginia, and interned at hospitals in Huntington.

He was a Past President of the West Virginia Tubercular and Health Association, the Medical College of Virginia Alumni Association, and the Fayette County Medical Society.

Doctor Bittinger was an honorary member of the Fayette County Medical Society, the West Virginia State Medical Association and American Medical Association.

Survivors include the widow; two brothers, the Rev. John B. Bittinger of Jacksonville, Florida, and Morris H. Bittinger of Farmville, Virginia, and a sister, Mary Claggett Bittinger of Winchester, Virginia.

* * *

CHAUNCEY B. WRIGHT, M. D.

Dr. Chauncey B. Wright, retired Huntington surgeon, died on July 13 at his home. He was 81.

Doctor Wright, a native of nearby Ceredo, served as President of the West Virginia Cancer Society from 1945 to 1948, and a member of the Board of Directors of the American Cancer Society in 1949-50. In 1961, he received an award from the national Society for distinguished service in cancer control.

Doctor Wright was Chairman of the State Medical Association's Cancer Committee in 1967-68.

He was graduated from Johns Hopkins University and received his M. D. degree in 1925 from Cornell University. He interned at French Hospital in New York City, and began practice in Huntington in 1927.

Doctor Wright was a member of the American College of Surgeons and the International College of Surgeons, and was an honorary member of the Cabell County Medical Society, West Virginia State Medical Association and American Medical Association.

Surviving is the widow.

* * *

KENT M. HORNBROOK, M. D.

Dr. Kent M. Hornbrook of New Martinsville died on July 20 in a Wheeling hospital. He was 75.

A native of New Martinsville, he practiced there from 1933 to 1974, when he retired.

Doctor Hornbrook was a former President and Secretary-Treasurer of the Wetzel County Medical Society.

He received his undergraduate degree and M. D. degree (1931) from the University of Pittsburgh.

He was a retired member of the Wetzel County Medical Society, West Virginia State Medical Association and American Medical Association.

Survivors include the widow; three sons, Dr. Robert H. Hornbrook of Morgantown, Dr. K. Roger Hornbrook of Oklahoma City and William R. Hornbrook of New Martinsville; two brothers, Charles Hornbrook of Holiday, Florida, and Dr. Gene Hornbrook of La Mesa, California; and a sister, Augusta Hornbrook of Parma Heights, Ohio.

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References: 1. Shaw S, Lieber CS: Nutrition and alcoholism, chap. 40, in *Modern Nutrition in Health and Disease*, edited by Goodhart RS, Shils ME. Philadelphia, Lea & Febiger, 1980, pp. 1220, 1237. 2. Watkin DM: Nutrition for the aging and the aged, chap. 28, in *Modern Nutrition in Health and Disease, op. cit.*, p. 781. 3. Shils ME, Randall HT: Diet and nutrition in the care of the surgical patient, chap. 36, in *Modern Nutrition in Health and Disease, op. cit.*, pp. 1084, 1089, 1114. 4. Dixon RE: *Ann Intern Med 89* (Part 2): 749-753, Nov 1978. 5. Committee on Dietary Allowances, National Research Council: Recommended Dietary Allowances, ed 9. Washington, National Academy of Sciences, 1980, p. 13.

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State Medical Association Lists Names of New Members

The following is a list by component societies of new members of the West Virginia State Medical Association elected from January 1 through June 30, 1982:

Boone

Dante R. Oreta ..... Charleston
Gary F. Steele ..... Madison

Cabell

Alfred Baldera ..... Barboursville
Ghazala Butt ..... Huntington
Stebbins B. Chandor ..... "
Michael A. Fiery ..... "
Prithi Pal Khatter ..... "
Joye A. Martin ..... "
Thomas E. McCay ..... "
Michele Rivera ..... "
Thomas K. Savory ..... "
Carol Scott-Conner ..... "
J. Michael Seddon ..... "
Joseph Wm. Werthammer ..... "

Central West Virginia

Alejandro Callejas-Baldizon ..... Richwood
William D. Daniel ..... Buckhannon

Eastern Panhandle

Robert F. Buckman ..... Martinsburg
Michael E. Gayle ..... Berkeley Springs
William F. Schrantz ..... Martinsburg

Fayette

Pablo Del Rosario Esquerra ..... Montgomery

Greenbrier Valley

William S. Dukart ..... Ronceverte
Nathaniel N. Harris ..... Lewisburg
P. Michael Nerz ..... White Sulphur Springs

Hancock

Lubin Alimario ..... Weirton
Young J. Lee ..... "

Harrison

Harry Bishop ..... Clarksburg
Martin R. Coleman ..... "
Abdo Faddoul ..... "
Douglas Jessup ..... "
Teodoro Medina ..... "
Louis F. Ortenzio, Jr. ..... Nutter Fork
Mahesh Pandya ..... Bridgeport
Jung W. Park ..... Clarksburg
Maurice C. Rhodes ..... Nutter Fork
Janis White ..... Clarksburg
Shelia Joan Walkup ..... Morgantown

Kanawha

Essa Abdulla ..... Charleston
Nicholas Cassis, Jr. ..... "
Ravindra K. Gogineni ..... South Charleston
Alan J. Hay ..... Belle
Getta Jayaram ..... South Charleston
Richard E. Kleinmann ..... Charleston
Richard Ethen Koon ..... "
Roger L. Michael ..... Hurricane
L. M. Minardi ..... Charleston
James S. Rogers ..... "
Francis M. Saldanha ..... "
Ramanathan Sampath ..... "
Gabriel G. Szego ..... "
Michael Paul Taylor ..... Dawes
J. V. R. Teleron, Jr. ..... Charleston

Logan

Charles V. Benoit ..... Logan
Subhash Bhanot ..... West Logan
Alberto M. Garma ..... Logan
Leonardo Gonzales ..... Man
Dominador Lao ..... "
Noor Loynab ..... Whitman
Rohollah Moainie ..... Logan
Lucena Ong ..... Man
Pathom Thavaradhara ..... Logan

Marion

Thomas B. Hokanson ..... Fairmont
Guy David Leveaux ..... "
L. M. Nardella ..... "
Li-Hsia Wang ..... Morgantown
James Michael Wertman ..... Fairmont

Marshall

James E. Goodwin ..... Glen Dale

McDowell

Charito T. Flores ..... Welch

Mercer

Nasreen Riaz Dar ..... Princeton
Malonnie Kinnison ..... Arlington, VA
Stephen P. Raskin ..... Bluefield
Theodore P. Werblin ..... "

Mingo

T. M. Dharia ..... Williamson
Allan A. D. Dizon ..... "
Bapuji Narra ..... "
Amelia Javier Santiago ..... "

Monongalia

Firas H. Al-Kawas ..... Morgantown
John J. Berry ..... "
Thomas F. Hogan ..... "
Charlene F. Horan ..... Blacksville
Luna S. Iskander ..... Morgantown
Jeffrey A. Kahn ..... "
Norval L. Rasmussen ..... "
Andrew Summers ..... "
Theodore S. Thomas ..... "

Ohio

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Samuel G. Christopher ..... Wheeling
George R. Clarke ..... "
Marion H. Drews ..... "
Sheldon Kapen ..... "
Donald W. Kress ..... "
John Michael Lawson ..... "
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Romulo G. Villanueva ..... "
Wladimir Zyznewsky ..... "

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Allan Figueroa-Dip ..... Parkersburg
Mansoor Matchaswalla ..... "
G. Finbar Powderly ..... Elizabeth
N. N. Reddy ..... Parkersburg
Charles W. Reyes ..... "
Joseph C. Woofter ..... "

Potomac Valley

Robert E. Gladsden ..... Keyser
Dinesh B. Shah ..... "
Suratkal V. Shenoy ..... "

Preston

Dennis F. Saver ..... Masontown

Raleigh

Menna Ajit Bakare ..... Beckley
David C. Foster ..... "
Cordell R. Honrado ..... "
Miraflor Khorshad ..... "

Carl S. Larson	Beckley
Patrick Lillard	"
Syed Rasheed	"
Mohammad A. Sobhan	"

Tygart's Valley

Raymond L. Hassett	Elkins
Jo A. Jones	Green Bank
Mary E. Myers	Philippi

Western

Norma Balano-Olaso	Spencer
Steven R. Kessel	Ripley
Danis Soylu	Spencer

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Patricia Bonitatibus	WVU, Morgantown
David J. Brailer	" "
Mark A. Byard	MU, Huntington
Sara Casto	" "
Rusty S. Cook	WVU, Morgantown
William T. Corder	" "
David Allen Faris	" "
Glen E. Johnson	" "
Keith A. Knupp	" "
Timothy Gordon Lesaca	" "
George Daniel Martich	" "
Perry Meadows	MU, Huntington
Robin R. Meek	WVU, Morgantown
Loren Marc Meyer	" "
Charles Andres Moore	" "
Matthew David Ohl	" "
Kelly M. Pitsenbarger	MU, Huntington
Stephen Randall Powell	WVU, Morgantown
Evelyn Ray Rector	MU, Huntington
Larry A. Rhodes	WVU, Morgantown
Lowell Carroll Shinn	MU, Huntington
Lee Ann Skaff	WVU, Morgantown
Lee Bryan Smith	MU, Huntington
Georgia Delaney Sturgeon	WVU, Morgantown
Charles Alan Tracy	" "
James Peter Viglianco	MU, Huntington
Michael Blaine Voorhees	WVU, Morgantown
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Answers To Review Article Questions

(Questions on Page 224)

1. B. Alzheimer's disease
2. E. Brain biopsy
3. True
4. E. All of the above
5. B. Thiamine
6. E. All of the above
7. True
8. True
9. False
10. False

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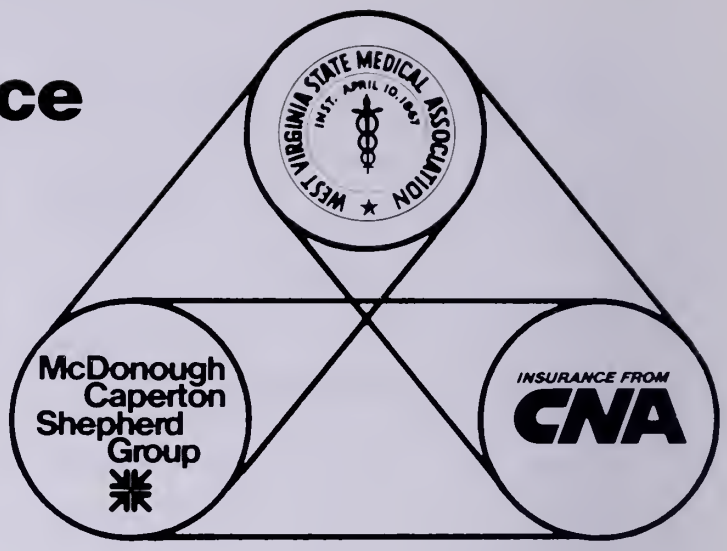

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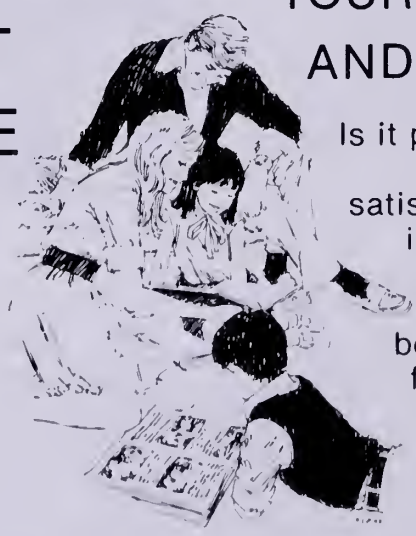

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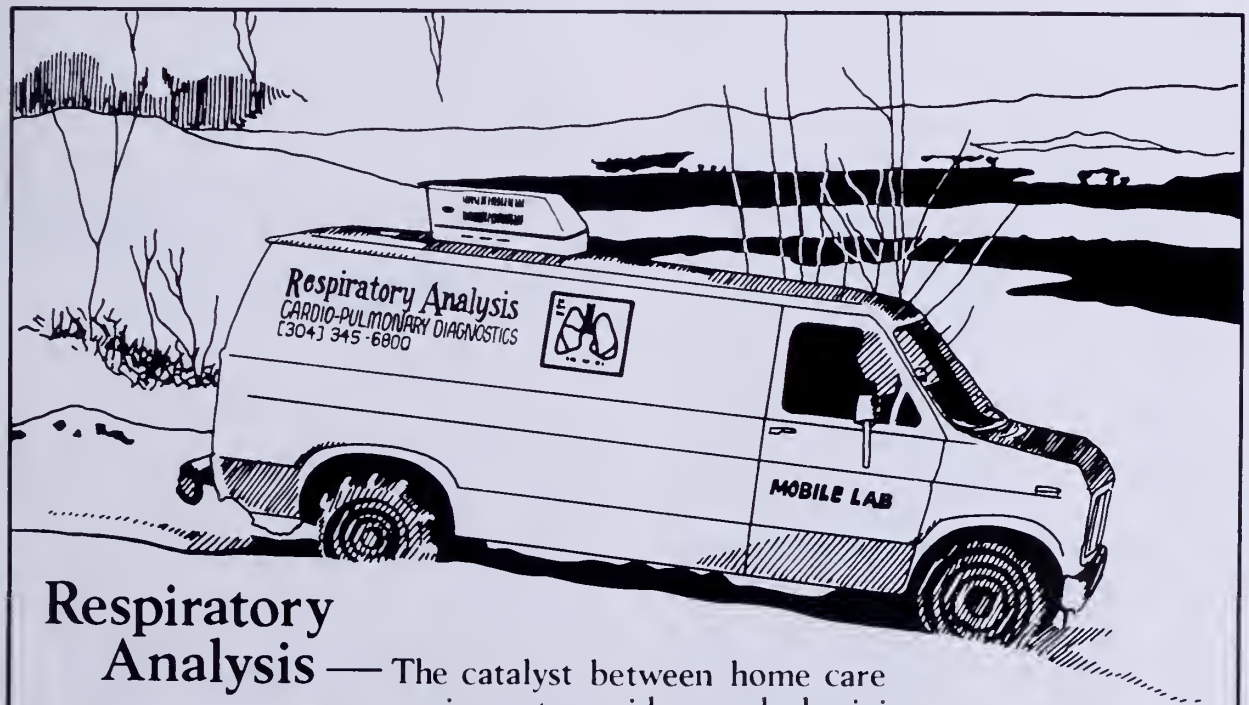

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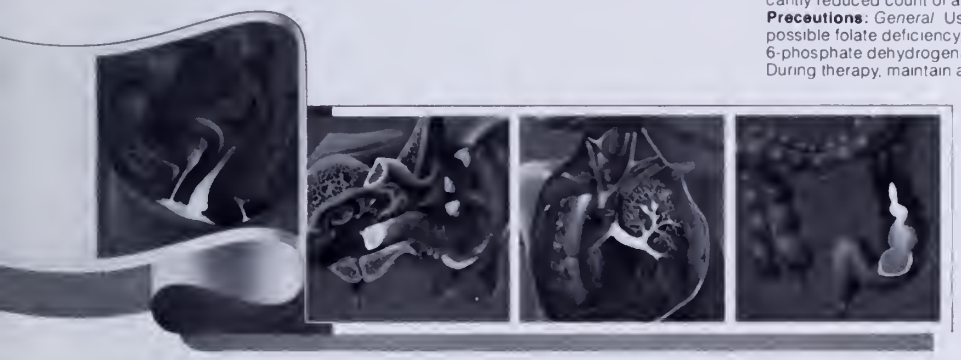

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BACTRIM™ (trimethoprim and sulfamethoxazole/Roche)
Before prescribing, please consult complete product information, a summary of which follows:
Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.
For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.
For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.
For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.
Also for the treatment of documented *Pneumocystis carinii* pneumonitis.
Contraindications: Hypersensitivity to trimethoprim or sulfonamides, patients with documented megaloblastic anemia due to folate deficiency, pregnancy at term; nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age.
Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.
Precautions: *General.* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.
Pregnancy. Teratogenic Effects. Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.
Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias.* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions.* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions.* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea, pseudomembranous colitis and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions.* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.
Dosage: Not recommended for infants less than two months of age.
URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN
Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.
Children. Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.
For patients with renal impairment. Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.
ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS IN ADULTS:
Usual adult dosage. 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 14 days.
PNEUMOCYSTIS CARINII PNEUMONITIS
Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.
Supplied: *Double Strength (DS) tablets,* each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100, Tel-E-Dose® packages of 100; Prescription Paks of 20 and 28. *Tablets,* each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40. *Pediatric Suspension,* containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml), cherry flavored—bottles of 100 ml and 16 oz (1 pint). *Suspension,* containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); fruit-licorice flavored—bottles of 16 oz (1 pint).

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1. Rubin RH, Swartz MN *N Engl J Med 303* 426 432, Aug 21, 1980 2. Data on file, Medical Department, Hoffmann La Roche Inc.

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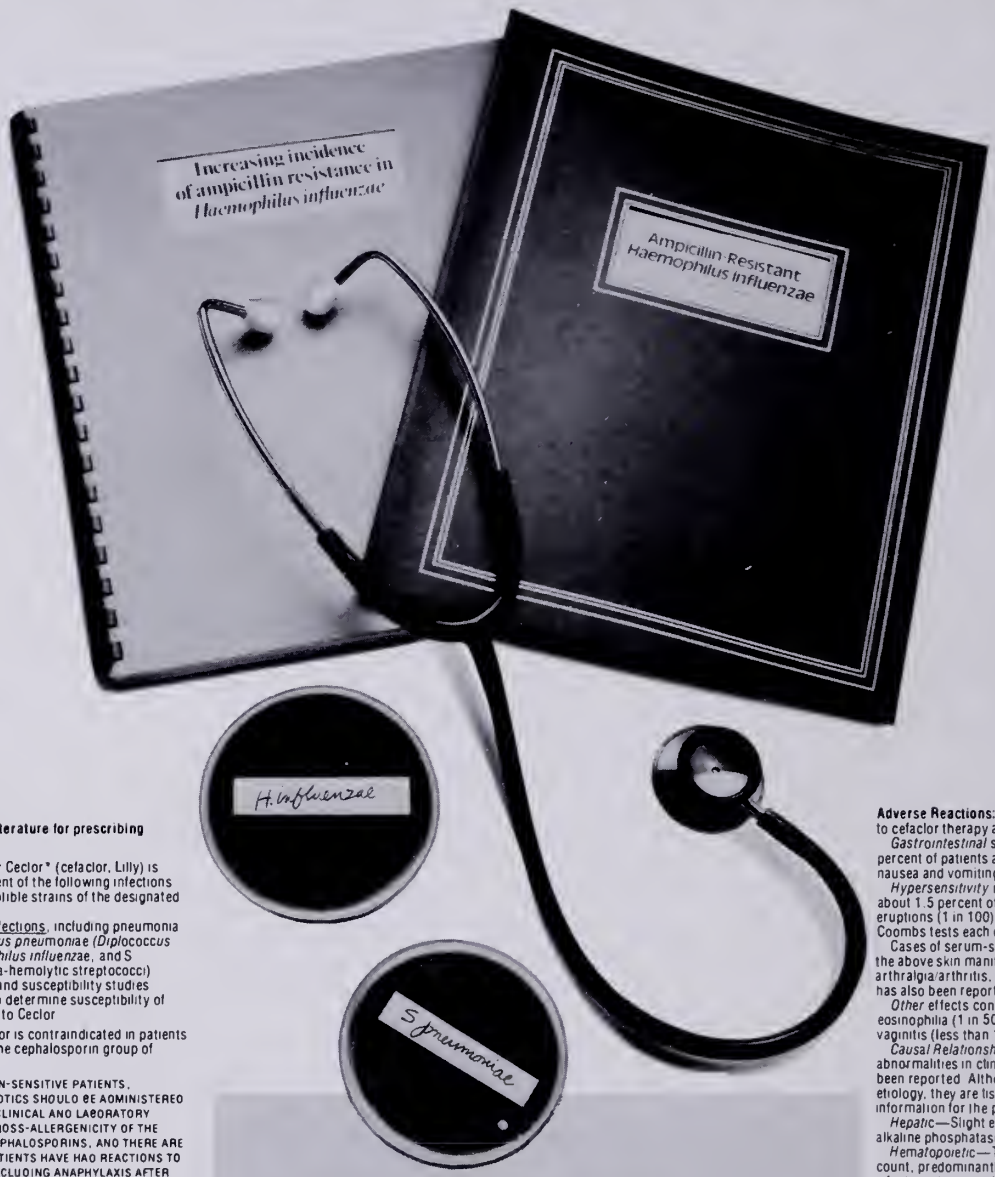
An added complication... in the treatment of bacterial bronchitis*



Some ampicillin-resistant strains of Haemophilus influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-6]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

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cefaclor

Pulvules®, 250 and 500 mg

Brief Summary.
Consult the package literature for prescribing information.

Indications and Usage: Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae*, and *S pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS TO BOTH DRUG CLASSES (INCLUDING ANAPHYLAXIS AFTER PARENTERAL USE)

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs

Precautions: If an allergic reaction to cefaclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e g , pressor amines, antihistamines, or corticosteroids

Prolonged use of cefaclor may result in the overgrowth of nonsusceptible organisms Careful observation of the patient is essential If superinfection occurs during therapy, appropriate measures should be taken

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs test may be due to the drug

Ceclor should be administered with caution in the presence of markedly impaired renal function Under such a condition, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly)

Usage in Pregnancy—Although no teratogenic or antifertility effects were seen in reproduction studies in mice and rats receiving up to 12 times the maximum human dose or in ferrets given three times the maximum human dose, the safety of this drug for use in human pregnancy has not been established The benefits of the drug in pregnant women should be weighed against a possible risk to the fetus

Usage in Infancy—Safety of this product for use in infants less than one month of age has not been established

Adverse Reactions: Adverse effects considered related to cefaclor therapy are uncommon and are listed below:

Gastrointestinal symptoms occur in about 2 5 percent of patients and include diarrhea (1 in 70) and nausea and vomiting (1 in 90)

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs tests each occur in less than 1 in 200 patients

Cases of serum-sickness-like reactions, including the above skin manifestations, fever, and arthralgia/arthritis, have been reported Anaphylaxis has also been reported

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients)

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician

Hepatic—Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40)

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40)

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200) [1030BOR]

*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either S *pneumoniae* or *H influenzae* *

Note. Ceclor® (cefaclor) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information

References

1 Antimicrob Agents Chemother , *8* 91, 1975
2 Antimicrob Agents Chemother , *11* 470, 1977
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5 Current Chemotherapy (edited by W Siegenthaler and R Luthy), II 880 Washington, D C American Society for Microbiology, 1978
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7 Data on file, Eli Lilly and Company
8 Principles and Practice of Infectious Diseases (edited by G L Mandell, R G Douglas, Jr , and J E Bennett), p 487 New York John Wiley & Sons, 1979

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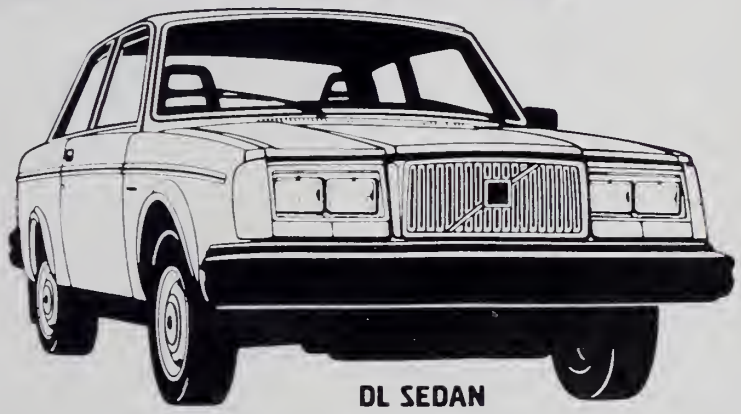

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The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions

Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

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The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

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References 1. Pitts NE, Migliardi JR: *Clinical Pediatrics* 13:87, 1974. **2.** Modell W: *Drugs of Choice* 1980-1981. C. V. Mosby Co., St. Louis, 1980, p. 362. **3.** Goodman LS, Gilman A: *The Pharmacologic Basis of Therapeutics*, 6th edition, MacMillan Publishing Co., Inc., New York, 1980, p. 1032.

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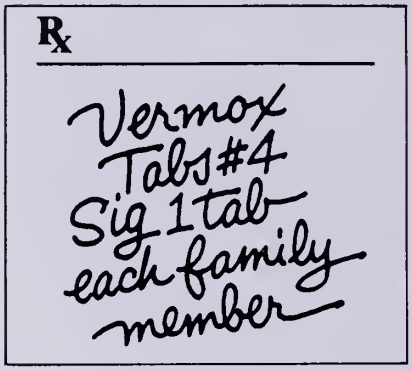

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	Whipworm	Common Roundworm	Hookworm	Pinworm
cure rates				
mean	68%	98%	96%	95%
(range)	(61-75%)	(91-100%)	–	(90-100%)
egg reduction				
mean	93%	99.7%	99.9%	–
(range)	(70-99%)	(99.5%-100%)	–	–

CONTRAINDICATIONS VERMOX is contraindicated in pregnant women (see Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

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PEDIATRIC USE: The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

ADVERSE REACTIONS Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

DOSAGE AND ADMINISTRATION The same dosage schedule applies to children and adults. The tablet may be chewed, swallowed or crushed and mixed with food. For the control of pinworm (enterobiasis), a single tablet is administered orally, one time. For the control of common roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days. If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.

HOW SUPPLIED VERMOX is available as chewable tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets.
VERMOX (mebendazole) is an original product of Janssen Pharmaceutica, Belgium.

US Patent 3,657,267
December 1979

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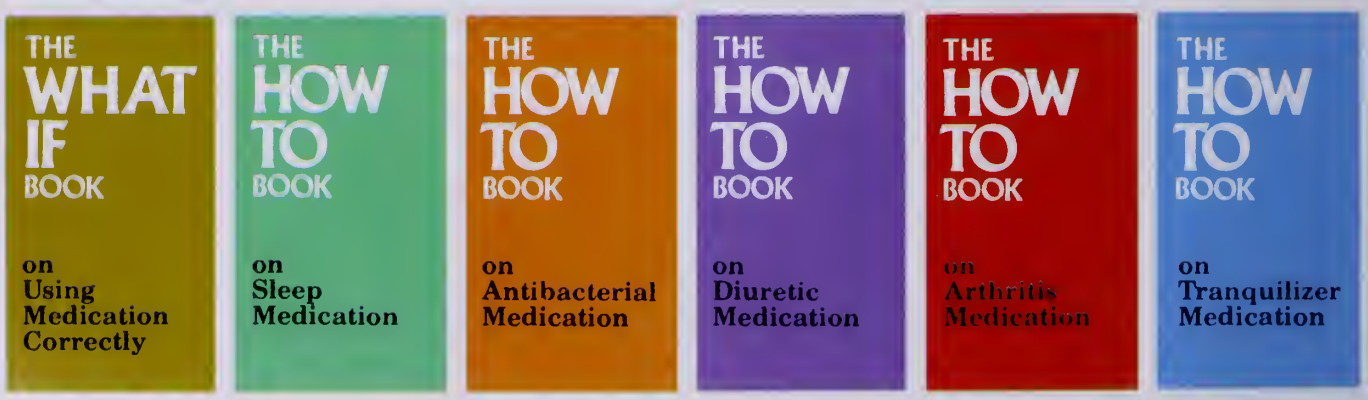

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Spinal Screening In West Virginia

ROBERT W. LOWE, M. D.
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Scoliosis is asymptomatic and occurs in children in an age group where they go for prolonged periods of time without medical examination. Therefore, screening for scoliosis is important, and has been effective in many areas of the United States. A recent survey of spinal screening programs in West Virginia revealed that 70 per cent of those counties that responded do have spinal screening programs. The percentage of children referred to physicians from these screening programs varied from one to 20 per cent. This report is intended to help make spinal screening more uniform and make the number of referrals to physicians more appropriate. Guidelines are proposed for scoliosis screening programs as well as for the primary care physician to whom such patients are referred.

Newborn screening for congenital dislocation of the hip has demonstrated that early recognition and early appropriate treatment have diminished complications and increased the incidence of attainment of normal hips for children with this problem. Scoliosis treatment is easier, and long-term results better, with early recognition and early effective treatment. The earlier scoliosis is detected, the more likely that brace treatment (if needed) will be effective and surgery will not be required.

Scoliosis becomes evident in the 10- to 12-year-old range. This is a time when children go for long periods of time without medical examination, as they are rarely sick. Many of them feel they've outgrown their pediatrician, and are reluctant to see a new physician unless absolutely necessary. Scoliosis is not painful and so may not be called to the patient's or physician's attention until late in the problem. For these reasons, it is important to screen for scoliosis and other spinal deformities. Spinal screening has been found effective in other areas of the country such as Delaware where it is very rare for a child to require surgery for idiopathic scoliosis.

In a spinal screening program, students aged 10 to 15 are evaluated by interested school personnel including teachers, school nurses, physical education instructors or volunteers. The ideal age for screening is 12 to 13. This article will concern itself with how to recognize scoliosis and other spinal deformities, why screening for this problem is important, and when to refer patients found with this problem.

Why To Screen

The incidence of scoliosis (greater than 10 degrees) is about 20 per 1,000. The incidence is identical in boys and girls; however, progressive curvature and curves requiring treatment are more common in girls than in boys by almost seven to one. It has been found in previous school screening programs in West Virginia (Lowe & Matheny) that as many as 7.2 per cent of patients screened will be referred to a physician, but only 1.7 per cent will require treatment. Some patients will have other physical findings, not true scoliosis. Others will have scoliosis that is not progressive and does not

require treatment. At the present time, we do not know how to determine which children will not require treatment; therefore, it is important to identify *all* those *skeletally-immature* individuals with scoliosis and follow these patients to determine if their curvature is progressive and requires treatment.

Since scoliosis is not painful and can occur in otherwise healthy children, it is many times far advanced by the time diagnosis by a physician is made if early screening has not been done. The treatment of scoliosis (and other spinal disorders) is greatly simplified by early detection, when the deformities are small and progressive curves are more amenable to brace treatment. Other deformities of the spine, including kyphosis and hyperlordosis, are easily detected in a spinal screening program. If progressive or advanced problems are detected, medical observation or treatment may be required.

It fortunately is uncommon to have deformities of the spine which significantly decrease pulmonary function. Pulmonary complications occur in those patients with curves greater than 60 degrees or with thoracic lordosis. In patients above age 50 with curves greater than 90 degrees, the risk of death is three times greater, and a working disability is 20 times more likely. Too, a 50-per cent reduction in vital capacity is noted. By instituting brace treatment when progressive curves are in the range of 20 degrees in a skeletally-immature patient, the few that have the potential to develop the more advanced curves with pulmonary complications can be avoided.

A recent survey of county school systems in West Virginia indicates that spinal screening programs are active in 70 per cent of the responding counties (29 of 40 responses).

SUMMARY OF WEST VIRGINIA SPINAL SCREENING PROGRAMS

Number of Counties with a Screening Program	*Usual Grades Screened*	*Number of Children Screened*	*Number Referred*	*Percentage Referred*
29	7-8	16,871	962	5.7%

The percentage of children referred from various screening programs varied widely (1-20 per cent). We hope that this report will help to make spinal screening more uniform and appropriate.

SCREENING PERSONNEL

	Number of counties*
School or Registered Nurse	20
Public and County Health Nurse	7
Physicial Education Teacher	6
Division of Handicapped Children's Services	5

*Many counties use several screening personnel.

How to Screen

A school spinal screening program is a large undertaking. It is a multi-disciplinary organization in a community that may include teachers, school nurses and physicial education instructors. It may require the help of the school board and local physicians. State crippled children's services and other ancillary services also may be part of this group. The specifics of screening a large number of children between the ages of 10 and 15 involve time and effort from a number of people, and usually require interrupting

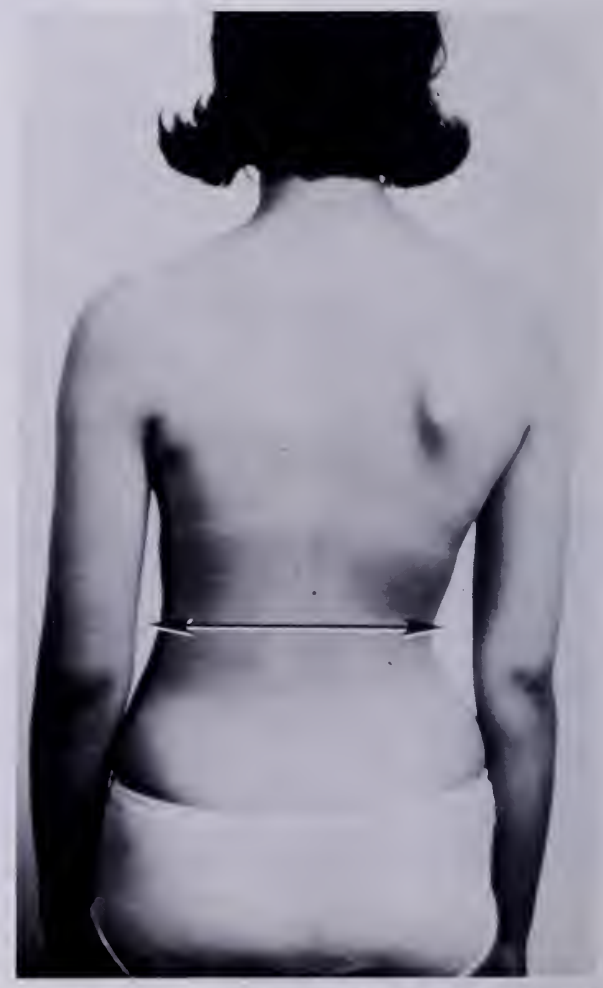

Figure 1. Notice the asymmetry in the air space between the arms and the thorax, the prominence of the right seapula and asymmetry of the neck and shoulder lines.

school. It is especially important (and if resources are limited) to screen during the early at-risk years, i.e., ages 11 to 12, when the most good can be done.

Before screening is instituted in a school, an information and permission form (Appendix 1) is sent home to the parents. Boys and girls are screened separately and need to be examined from the waist up. This is most conveniently done as part of a physical education class where the boys may simply wear gym trunks and remove their shirts. Girls may wear a halter top, gym shorts or a two-piece bathing suit. Evaluation of the student standing can show asymmetry in the air space pattern between the arms and the body or asymmetry in the waistline (Figure 1). In this photograph, the asymmetry of scapulae and the slight suggestion that the left buttock is fuller than the right also are discernible.

Each student then is examined in the forward bending position (Figure 2). Note the elevation of the portion of the rib cage in the photograph. If the examiner squals slightly, a fullness of one side of the lumbar muscles, usually left, frequently can be noted if scoliosis is present.

Finally, the child is viewed from the side to observe if posture is normal or whether the shoulders and spine curve forward. Some children will have kyphosis or roundback without scoliosis. If kyphosis is questionable, the child is then asked to lie prone, i.e., face down. If the rounding of the spine persists to an extent, the child should be referred for evaluation of roundback or kyphosis.

Figure 2. On forward bending, the elevation of the rib cage is evident (arrow). There also is a slight fullness in the left lumbar area as compared to the right. These are the most common screening findings of idiopathic scoliosis.

Referrals

Children with positive physical findings either are referred to an experienced school nurse for further screening or to their own personal physician for evaluation. The physician then may elect to refer those affected patients to an orthopedic surgeon or other individual familiar with adolescent spine problems, and who can obtain a standing roentgenogram of the spine (if indicated). As an alternative, every child, regardless of income, is entitled to one free examination by the Crippled Children's Services of West Virginia.

The family physician or primary evaluating physician needs to be patient with the screening individuals. Up to 25 per cent of students screened have something the screening individuals question. With further screening and experience, this number quickly settles down to about four to five per cent. This still is about twice the actual incidence of scoliosis. Some students will have kyphosis or hyperlordosis; others will have variation in scapular height not associated with spinal deformity, and many will have a limb-length discrepancy. It is important for the primary or evaluating physician to review with the family the physical findings that brought them to his office, even if the patient does not have scoliosis, i.e., high scapula, asymmetry of neck, waistline or buttocks. The screening individuals, usually school nurses, need to be encouraged to become experienced to continue in the program, and to aid in decreasing the number of children that require spinal surgery.

Initial Evaluation

It is reasonable for the primary physician to evaluate a patient clinically and radiographically. Limb-length discrepancy can be a major cause of small lumbar curves, and these should be detected. The family history is very important, since up to 80 per cent of patients present with a positive family history. Thus, it is important to screen siblings of scoliotic patients.

Only a single standing posterior-anterior spine film is required for radiographic examination. The Cobb method for measuring x-rays is easy

to do, and probably should be done by the primary physician or radiologist to determine if scoliosis is present and the relative magnitude of the curve (Figure 3).

Determination of whether scoliosis is idiopathic (occurring in approximately 85 per cent of patients) or congenital usually can be made radiographically. Unless there is a clinically apparent, definite abnormality with kyphosis or lordosis, a lateral radiographic view is probably best ordered in a referral situation. This high-dose radiation radiograph should be taken only when necessary and radiation exposure minimized. Bending films are not necessary.

In most instances of scoliosis, the curve is small, below 15 degrees, and not progressive. However, if the condition does progress, it does so during the adolescent years of rapid growth. A curve greater than 10 degrees should be followed by a physician with a repeat standing x-ray in approximately six months.

A curve less than 10 degrees should be obeserved. For such patients, it could be suggested to the mother to try to draw on paper those physical signs which the physician shows her, i.e., asymmetry of scapula, asymmetry of waistline, size of hump, unlevel shoulders, etc. She should place the paper in the kitchen cabinet, family Bible, or other safe place, and over the next two to three years (growing years), on each major holiday (Christmas, Easter, July 4th, Labor Day), examine her child to observe the previously noted points for possible progression. Any change should be reported to the treating physician. This assures that the child will continue to be observed three or four times yearly, and the responsibility is assigned to the family. This also will supplement the child's being screened perhaps only once during his school years.

As a guide for instructions to patients, curves less than 30 degrees have about a 20-per cent risk of increase, and curves greater than 50 degrees have about a 90-per cent risk of increasing if the patient is skeletally immature. Most curves are not progressive. Curves in the 20- to 40-degree range will be braced if they are progressive and, in many instances, if they are skeletally immature, may be braced if there is reason to believe that they will be progressive. Curves greater than 50 to 60 degrees are not candidates for brace treatment and may require surgery. Scoliosis is not painful; other problems such as infection, tumors, spondylolysis or spondylolisthesis should be considered and investigated if curvature is painful.

Summary

When a spinal deformity is progressive, the progression occurs at the time of puberty. An untreated deformity can become severe and lead to a cosmetic deformity and possibly even dis-

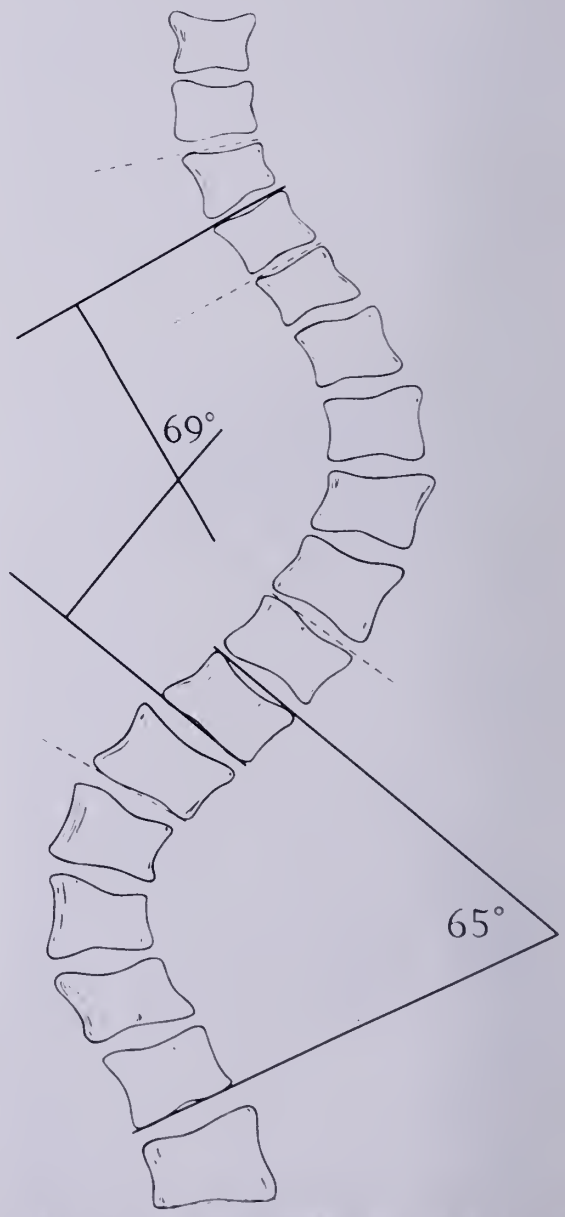

Figure 3. The upper thoracic end vertebra (the top of the curve) is the vertebra with the superior border still inclined toward the thoracic concavity. Similarly, the lowest vertebra with the inferior border inclined toward the concavity is the lower margin of the curve. The angle can be measured directly or a perpendicular can be erected to these two lines. The angle measured is the approximate angle of scoliosis as determined by the Cobb method.

ability. With early discovery, observation and treatment the curvature can be kept from getting worse. It is important for the family and for the referring physician to understand that brace treatment, if needed, does not improve the curvature, but negates its progression. At any stage of progressive scoliosis, treatment can and should be instituted if the patient is skeletally immature. Young people treated for scoliosis in the early stages can expect to have a virtually normal functioning spine, to participate in all physical activities, and to have only a minimum of cosmetic deformity. Just as in treatment of congenital dislocation of the hip, the earlier treatment begins, the easier it is to get results that are acceptable, both to the patient and the physician.

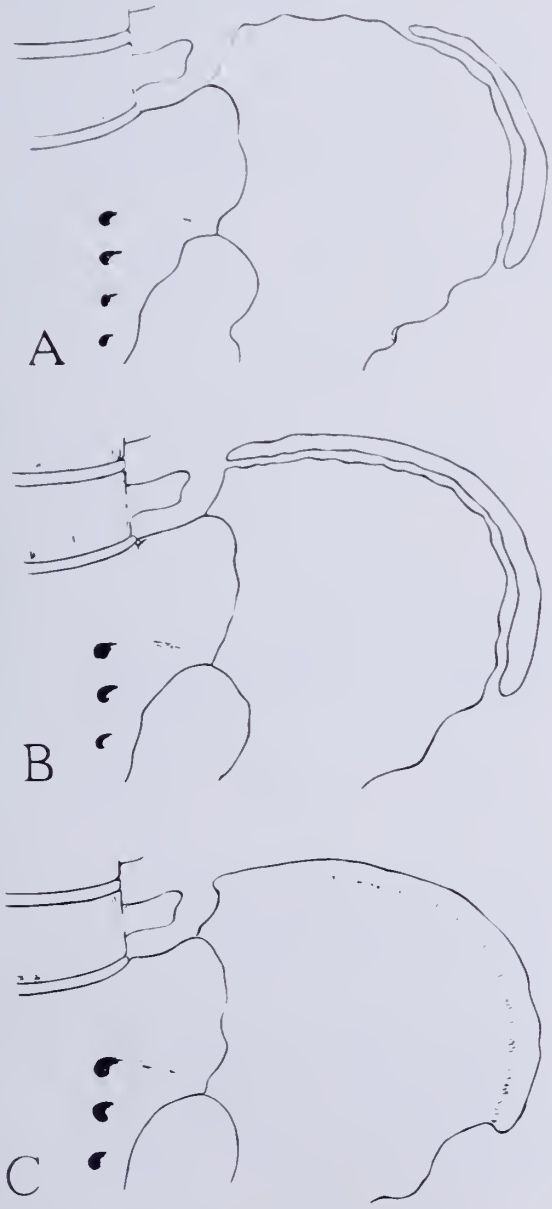

Figure 4. Following the progression of the closure of the iliac apophyses is one way to determine skeletal maturity. Commonly, a patient with scoliosis is kept in a brace until the iliac apophyses are capped (B) and beginning to fuse before beginning weaning from the brace. As long as the iliac apophyses are open, the patient is considered skeletally immature. This correlates with closure of the vertebral growth plates and with decreased risk of curve progression.

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Appendix 1a

_____ COUNTY SCHOOLS

_____, WEST VIRGINIA

TO: PARENTS

FROM: R.N. (School Nurse)

RE: SCOLIOSIS SCREENING

DATE:

During the next few months scoliosis screening will be conducted in County Schools. This screening is done to find children with suspected curvature of the spine. According to available information, 10 to 20 children in every 1,000 may develop scoliosis, and 1 in 3 will require treatment. If this condition is detected early and appropriately treated, progressive spine deformity can be prevented. For this reason a screening will be done.

The procedure for screening is a simple one in which the screener (nurse or physical education teacher) looks at the child's back in the standing and forward bending position.

If your child has a suspected curvature, you will be notified and asked to take the child to your family physician, pediatrician or an orthopedic doctor for diagnosis.

Yes, I would like my child to participate in the scoliosis screening.

_____

NAME OF CHILD (LAST) (FIRST) (MIDDLE)

_____

ADDRESS (STREET OR R.R.) (CITY) (PHONE)

_____

SCHOOL (GRADE)

_____

PARENT'S OR GUARDIAN'S SIGNATURE

PLEASE RETURN THIS FORM TO YOUR SCHOOL AS SOON AS POSSIBLE

Appendix 1b

Dear Parent:

Your child _____ participated in our school scoliosis screening program.

The cause of scoliosis (curvature of the spine) is unknown. It becomes more apparent during adolescence because of the growth spurt. This condition can more often be corrected if found at any early stage.

The results of this screening indicate that your child needs further evaluation to determine whether or not he/she requires treatment. It is urged that you take your child to your family physician for an examination.

Please request that the examining physician complete this form. When your child has completed his/her examination (and you have signed the parent signature line°) please return to _____ R. N. _____ Board of Education or the principal.

Thank you for your cooperation.

PHYSICIAN'S FINDINGS AND RECOMMENDATION:

I have examined _____

( ) Standing (anterior-posterior x-ray) shows:

_____

( ) No significant findings at this time _____

( ) Need for further evaluation _____

( ) Re-examination or treatment recommended (If so, Date _____).

Additional Comments: _____

Signed _____, M. D.

Address _____

Telephone No. _____

° _____
Parent's Signature Line

_____
Parent's Address Phone

Infant Walkers Can Be Hazardous

SPECIAL seats for children riding in automobiles and toxic substances left where children can get hold of them have been well publicized in articles directed at safeguarding the welfare of children. Now comes another hazard for youngsters: the infant walker.

According to two pediatricians writing in a recent issue of the *American Journal of Diseases of Children,* not only is there no proven benefit from the use of walkers, but also these seats on wheels can actually be dangerous.

In their survey of parents of 150 children between the ages of five and 15 months—all users of infant walkers—Carol A. Kavanagh, M. D., and Leonard Banco, M. D., found that 47 children suffered mishaps in their walkers. Most had bruises and abrasions, but some had serious head injuries when the walkers either tipped over or fell down stairs.

Doctors Kavanagh, who is with the Joseph C. Wilson Health Center in Rochester, New York, and Banco, who is with Hartford Hospital in Connecticut, admit that their study lacked a control group who did not use walkers for comparison. Nevertheless, they conclude in their report that infant walkers are associated with a significant risk of injury, at least with their present design.

Infants, they said, certainly learn to walk without the practice they get in an infant walker.

The Low Back School: A New Palliative Approach To Low Back Pain

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The incidence of low back pain has always been a major source of difficulty in the U. S. population. Recently, a new approach, the Low Back School, has been developed to ameliorate this considerable personal, family, medical, economical and societal problem. This paper considers the evolution of the conceptual and historical development of the Low Back School as well as the specific goals and practices at the West Virginia Low Back Program.

Low back pain is a prevalent health and economic problem affecting significant numbers of individuals, their families, and society in general. Pheasant[1] reported data which suggested over 720,000 hospital discharges in the United States during 1974 were related to back pain. Further, he estimated total hospital and physician-related expenses for the national incidence of back pain care to be $1.38 billion in 1974.

Nagi, *et al.*,[2] reported data concerning the incidence of persistent back pain based on 1,135 self-reports from a stratified sample of residents in the metropolitan area of Columbus, Ohio. Eighteen per cent of this sample indicated persistent back pain, with four per cent citing surgical intervention for their back pain, and 38 per cent indicating moderate-to-severe work limitations due to their back pain. Among industrial workers, the incidence of back pain has been estimated to be as high as 65 per cent.[3]

Although the number of published reports concerning the incidence and cost of low back pain is limited, it seems reasonable to state that the disorder is fairly common, and that patients suffering from back pain utilize impressive amounts of health care services,[4] often with little or no relief. Many patients in their search for pain relief are exposed to high risks associated with improper therapy including narcotic addictions and/or multiple, useless surgeries.[5]

Bonica[5] has delineated several recent developments that have attempted to rectify some of the deficiencies in the traditional health care services available to patients with low back pain. Included in recent advances in the treatment of low back-related problems has been the creation of multidisciplinary pain groups which incorporate clinicians and basic scientists in research, teaching and patient care.

The concept of the low back school also is a related advance in treating low back pain. This primarily didactic approach was popularized in Europe by Marianne Zachrisson-Forsell, a physical therapist.[6] The Swedish method of Zachrisson-Forsell brought about the advent of educational classes for training many patients at a time in body mechanics and proper care of the back. There is some statistical evidence to support the superiority of this training method over manipulation or other palliative therapy methods for returning low back patients to work.[7] During the 1970s the low back school concept was popularized in the United States by W. Harry Fahrini.[8]

U. S. Low Back Schools

The California Back School was developed in 1976 and was presented as a model to the American Academy of Orthopedic Surgeons in 1978.[9] The principal activity of the school is practice in application of theory to individual situations. Information is presented to patient groups by a number of techniques including didactic instruction on spine theory, practical economics and body mechanics, exercise instruction, audio-visual presentations, and an obstacle course to exemplify daily tasks and job-related activities. Resarch evaluating this program included data collected at one, three, and six months, and at one and two years. Follow-up data from the California Back School population was collected for a total of 300 patients through a combination of re-check visits, telephone interviews and letter interviews. Results indicated that 95.4 per cent of the patients did not seek further medical or non-medical help after the first month in the program. These results were maintained through two years.

The Mississippi Low Back School said its goal is to make the patient a responsible custodian of his or her spine so that the patient does not have to rely on braces, hospital, surgery, and medications.[10] The program is designed to deliver intensive instruction in the anatomy, physiology and dynamics of the lumbar spine. The emphasis of this program is on tailoring training to specific needs of an individual's occupation and life-style. Certain exercises are taught to strengthen muscle groups and stretch other contracted muscles. The program evaluates the success of each individual patient through behavioral measures assessing muscle power in four major muscle groups.

WVU Low Back Program

The West Virginia University Low Back Program evolved from the conceptual and physical confines of the WVU Pain Clinic. In West Virginia and at the Medical Center, in particular, the high incidence of low back pain has in large part accounted for the rapid growth of the WVU Pain Clinic. Since its beginning in 1977, the Pain Clinic has grown to service approximately 2,400 patient contacts annually, roughly 400 of which are new patients. Since approximately 60 per cent of the Pain Clinic comprises the low back population, this referral source alone constitutes a substantial body of patient demands. Because the Low Back Program services both the chronic and acute population, the potential patient population is considerable.

Definition, Purpose of WVU Program

The Low Back Program, as envisaged at the WVU Medical Center, is a practical course of study on the anatomy, physiology and mechanics of the lower spine. It also teaches the low back patient to handle the emotional accompaniments of this disabling problem. The patient is taught how poor posture, work habits, emotional stress, excess weight and lack of appropriate exercise can combine to cause low back trouble. The Low Back Program can show the patient how exercise, reduced stress and an awareness of appropriate posture can prevent back injury. This potential amelioration can be remedially beneficial, and also can provide a lifetime of low back health.

The goals of the Low Back Program can be divided into two main categories: general and specific. Table 1 lists the goals of the program. A major distinction of the WVU low back program from other low back schools is the dual emphasis found in the goals of the program. The program focuses on both the physical and psychological components of low back pain. Other programs neglect the psychological and behavioral aspects of pain that have been widely recognized and discussed by Fordyce,[11] Sternbach[12] and others. The patient's spouse or a significant other person also is included to supplement the program.

Table 2 outlines the specific topics of the low back program as well as the time devoted to each topic. The main session of the program is three to four hours in duration spaced over a five-hour day with a break for lunch. It was decided to implement the program in one day since many of the patients travel a long distance to the medical center and would find repeated trips for shorter sessions burdensome. All patients are scheduled to return for a follow-up session in six weeks. Patients also are given monitoring

TABLE 1

Goals of the WVU Low Back Program

A. General Goals:
1. Prevent back pain and/or reduce back pain
2. Avoid unnecessary excess treatment
3. Decrease expense for the individual and society

B. Specific Goals
1. Increase the strength of the back and the range of movement
2. To improve sleep when necessary
3. Teach the individual to handle stress
4. Establish good posture
5. To learn good body mechanics
6. To learn to communicate through nonpainful means
7. To not rely upon medication as a means of handling low back pain
8. To reduce unnecessary medical attendance for low back pain

TABLE 2

Low Back Program Outline
3- to 4-Hour Program

A. INTRODUCTION	10 minutes
B. VIDEO TAPE I "Caring For Your Back"	20 minutes
C. DISCUSSION OF TAPE AND PHYSICAL THERAPY OF PRACTICE	40 minutes
D. SLEEP PROGRAM	10 minutes
E. BEHAVIORAL MODIFICATION OF COMMUNICATION WITH SPOUSE	20 minutes
F. APPROPRIATE USE OF MEDICATION	10 minutes
G. TAPE II "Managing Low Back Pain"	20 minutes
H. DISCUSSION OF TAPE	30 minutes
I. LIFE STYLE CHANGES	10 minutes
J. RELAXATION EXERCISES	25 minutes
K. CONCLUSION	15 minutes

records to keep, which focus on recording activity levels, sleep habits and pain ratings. They also are contacted by phone to check on their progress and to address any questions or difficulties as they arise.

Patients are accepted into the Low Back Program only after complete physical work-up and referral from a physician. Certain conditions such as metastatic bone tumors and post-menopausal osteoporosis are considered inappropriate for the program because the central approach of the school is rehabilitation with a focus on remedial exercise and emotional management. Initial referrals are made to one of the following medical specialities: the WVU Pain Clinic, the WVU Department of Neurosurgery, or the WVU Department of Orthopedics. The patient is then channelled into the WVU Low Back Program.

Conclusions and Summary

In summary, low back pain in the United States is a formidable medical problem. One of the promising newer approaches to this serious difficulty is the Low Back School.

In general, low back programs set out to educate the low back patient as a means of reconditioning or rehabilitating the back. By providing both didactic and "hands on" experiences, the patient learns appropriate techniques of recuperating or strengthening the back. Explicitly, the Low Back School approach teaches the patient appropriate body mechanics, posture, and emotional management conducive to a healthy back.

Acknowledgement

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Medical Grand Rounds

From the West Virginia University Medical Center

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Hepatorenal Syndrome

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The hepatorenal syndrome has long been recognized as an ominous indication of usually terminal hepatic failure in a long-standing cirrhotic. In its strictest definition the syndrome consists of progressive renal insufficiency occurring in a patient with cirrhosis which is not explained by a careful search for any other known cause of renal failure. Treatment is disheartening; most attempts at present are directed at producing enough improvement in renal function to allow any possible improvement in hepatic function to occur.

This review summarizes the approach to the syndrome's diagnosis, postulations as to its pathogenesis, and attempts at its treatment. Recent observations of the syndrome's occurrence with acute hepatic failure and attempts at its surgical correction are also discussed.

THE hepatorenal syndrome (HRS) has been labeled as one of the more frustrating and disheartening occurrences of clinical medicine. Treatment of its consequences is most unrewarding, as are attempts at explanation of its causes.

Definition

A succinct definition of the syndrome would be that of progressive renal insufficiency which is not otherwise explained occurring in a patient with cirrhosis of the liver. The term "hepatorenal syndrome" actually was used first in 1932 to describe postoperative renal failure in patients requiring surgical relief of biliary obstruction. It has gradually evolved to the present definition. The early literature is fraught with references to "hepatorenal syndromes" which might better be described as pseudohepatorenal syndromes. These would include both episodes of renal failure occurring in cirrhotics for which, upon close inspection, a known cause can be demonstrated, as well as situations in which either disease states or toxins affect both the liver and kidney.

A recent study by Ring-Larsen in Denmark further clouds the definition by identifying the HRS in patients with fulminant hepatic failure.[1] His patients not only met the criteria for the syndrome, but he actually found little difference in the incidence and prognosis of the syndrome whether it occurred in cirrhotics or in patients with acute hepatic failure. We may have to broaden the definition to include both acute and chronic hepatic failures, but the crucial circumstances remain the same. The vagaries in definition, however, make interpretation of the syndrome's literature often as frustrating as the syndrome itself.

Probably the most fascinating aspect of the syndrome is its well-documented reversibility. A few spontaneous recoveries have occurred, and there is a good deal of anecdotal evidence indicating that improvement in renal function often parallels that in the hepatic function.[2] Most convincing, however, are the observations of several who have transplanted kidneys from patients with the syndrome to recipients with

normal livers, achieving results as successful as transplants done with other cadaveric kidneys.[3] Conversely, kidney function recovers in those few patients with the HRS who have received successful hepatic transplants.[4] These observations argue vigorously for the reversible nature of the syndrome and for rational attempts at its treatment despite its usually poor prognosis.

Clinical Presentation

Clinically, the HRS most commonly arises in the setting of Laennec's cirrhosis with jaundice and ascites. It has been noted following overaggressive diuresis, acceptable diuresis, gastrointestinal bleeding and paracentesis, or it may occur without any apparent precipitating event. Oliguria and progressive azotemia are the rule; however, nonoliguric renal failure may occur. In most patients a modest reduction in blood pressure from prehospitalization values is noted, but hypotensive ranges are uncommon. Hyponatremia, hypokalemia, and hepatic coma frequently precede renal deterioration but are not necessary for its occurrence. Whatever the clinical picture, the outcome is almost universally fatal. Interestingly, very few patients die uremic deaths. The HRS seems to be a contributing factor but is not the major contributor to the patient's demise. It might be thought of as a preterminal event generally signaling irreversible hepatic failure.

Diagnosis and Course

Laboratory features of this condition help most to distinguish it from other causes of acute renal failure (Table 1). Measurement of the urine volume is usually consistent with oliguria (<400 cc/day). The urine is generally acidic, and frequently contains small amounts of protein; however, there are usually few findings of hematuria and particularly the cellular casts that might typify acute tubular necrosis (ATN). The urinary concentration is variable but usually proceeds from quite concentrated early in the course toward the osmolality of the serum the longer the patient survives.

TABLE 1
Acute Renal Failure Indices

UNa – Urinary Concentration of Sodium

Prerenal	Renal
< 10 mEq/dl	> 40 mEq/dl

Renal failure index $= \frac{UNa}{UCr/PCr}$ Cr = creatinine

Prerenal	Renal
< 1.0	> 2.0

FENa = Fractional Excretion of Sodium

$= \frac{UNa/PNa}{UCr/PCr} \times 100$

Prerenal	Renal
< 1	> 1

U/P Osmolality

Prerenal	Renal
> 1.2	< 1.2

BUN and serum creatinine levels often do not reach levels seen in the terminal stages of primary renal disease. Most helpful are determinations of the urine electrolytes and serum and urine creatinine, for with these measures the pre-renal nature of the syndrome becomes obvious. The urinary sodium typically is less than 10 mEq/L, in distinction to the situation in ATN when it is generally greater than 40 mEq/L. Determination of the renal failure index, urine/plasma osmolarity ratio, or fractional excretion of sodium index similarly are well within pre-renal limits.

Hyponatremia and hypokalemia, the latter seemingly paradoxical in the face of acute renal failure, quite frequently exist. Hyponatremia is generally accounted for by deficiencies in free water clearance; hypokalemia may occur as a result of vomiting, diarrhea, diuretic use, secondary hyperaldosteronism, renal tubular acidosis, and respiratory alkalosis.

Several potentially reversible causes for acute renal failure may occur in the setting of cirrhosis, and for obvious reasons it is of paramount importance that the physician both recall and search for these conditions. Basically, these would include dehydration (due to vomiting, diarrhea or gastrointestinal blood loss), post renal obstruction, drug-induced interstitial nephritis, and pyelonephritis. In addition, several disorders affect both the liver and kidney and may give rise to a variety of pseudohepatorenal syndromes. These are listed in Table 2 and include infectious processes, generalized multiple-organ failures such as congestive heart failure or shock, collagen-vascular disorders, and toxin exposures.

The clinical course is disheartening, the outcome generally fatal; spontaneous recoveries are, in fact, so rare that they rate reporting, and then are often accepted as evidence that the diagnosis of HRS was incorrect.

Autopsy series have failed to reveal evidence of identifiable primary renal disease or pathognomonic findings in the kidney. Biliary or cholemic nephrosis is occasionally noted; except in the case of the Gunn rat, no correlation of this condition with renal failure exists. Glomerular

TABLE 2

Pseudohepatorenal Syndrome

A. Generalized Disorders		
1.	Infectious:	Leptospirosis Yellow Fever Reye's syndrome
2.	Circulatory:	Shock—Hypovolemic —Septic Congestive heart failure —cardiogenic shock
3.	Genetic:	Polycystic Disease Sickle Cell Disease
4.	Collagen Vascular:	Disseminated Lupus Erythematosus Periarteritis Nodosa
5.	Unknown Etiology:	Toxemia of Pregnancy Amyloidosis Sarcoidosis Hyperthermia Waterhouse - Friderichsen syndrome Thrombotic Thrombocytopenic Purpura
B. Toxins		
1.	Direct:	Carbon Tetrachloride Copper Sulfate Chromium
2.	Idiosyncratic:	Methoxyflurane Tetracyclines Streptomycin Sulfonamides
C. Neoplasms:		Metastatic Hypernephroma

sclerosis has been noted with equal frequency in patients with cirrhosis without renal compromise, and in those with the HRS; in no way can it be considered specific for the latter. Only rarely are findings at autopsy consistent with ATN in a patient judged to have had the HRS premorbidly.

Pathogenesis

Almost as difficult and frustrating as the syndrome is to treat are attempts to review the literature as to its pathogenesis. Besides the myriad of mechanisms proposed, one must sift through and exclude cases of pseudohepatorenal syndrome inadvertently included in the early literature. Several of the more promising mechanisms deserve serious consideration, and we should begin with a synopsis of what seems clearly to be the final common pathway to oliguria and azotemia.

As emphasized, the absence of structural changes in the kidney at autopsy, the reversibility of the syndrome after orthotopic liver transplantation, the successful use of kidneys from patients dying with the HRS for transplantation, as well as the occasional spontaneous reversal of the syndrome suggest that the problem is of a functional nature rather than an intrinsic renal disease. Therefore, it stands to reason that decreased renal perfusion due to hypovolemia may play an important role in its pathogenesis. The fact that the syndrome is often linked to conditions which would diminish the extracellular fluid volume (gastrointestinal hemorrhage, diuresis, paracentesis, and ascites) make this an attractive hypothesis. Some investigators have recorded decreased plasma volume and cardiac output in cirrhotics with oliguria;[5] others have shown that in the HRS both the plasma volume and cardiac output may be increased, normal or reduced.[6]

There do seem to be two distinct groups of patients with respect to their hemodynamic parameters. One has decreased plasma volume, decreased cardiac output and increased renal vascular resistance, and experiences a transient renal response to volume expansion. A second group exhibits normal or increased plasma volume, increased cardiac output, increased renal vasconstriction, and no response to volume expansion. Unfortunately, the two groups are clinically indistinguishable; furthermore, it may be a moot point, as any response to volume expansion is usually only transient.

Altered Renal Circulation

The above statements imply that apparently all patients with the HRS exhibit renal vasoconstriction. This has been documented nicely by various investigators. Epstein demonstrated angiographic beading and tortuosity of the interlobar and proximal arcuate renal arteries similar to the aneurysmal dilatations of polyarteritis.[7] Pointing up the functional nature of the disease, postmortem angiograms in the same patients revealed complete reversal of these changes. The same investigator also noted minute-to-minute variability of renal blood flow as measured by Xenon 133 washout curves, the variability often being so severe as to preclude interpretation of the studies. This strongly suggests a highly spastic renal circulation.

Other investigators have confirmed these findings. A study by Kew expands on these observations to show, by the Xenon washout technique, that while total renal blood flow is reduced, juxtaglomerular and medullary blood flow is maintained at the expense of cortical flow, a type of intrarenal shunting.[8] Remembering the renal anatomy, it is easy to see why there are a decreased GFR and pre-renal changes, but no tubular dysfunction or its endpoint, acute tubular necrosis.

Possible Chemical Mediators

While decreased plasma volume and cardiac output may or may not play a role in the pathophysiology of the HRS, increased renal vasoconstriction, and particularly corticomedullary shunting of blood flow, seem to be major contributors to its development. What, then, causes this corticomedullary shunting, especially its variable and presumably reversible nature?

A host of chemical substances have been postulated as possible agents of the above changes. These include false neurotransmitters, vasoactive intestinal peptide (VIP), vasodilator material, endotoxins, the renin-angiotensin system, the kallikrein-kinin system, and prostaglandins. The evidence for most of these vasoactive systems' or agents' effect on the syndrome is not well established.

Endotoxins are lipopolysaccharide components of the cell wall of gram-negative commensals of the gut. Following bacterial death the free endotoxins are absorbed and filtered by the normal liver. In the situation of portal hypertension it is easy to see that an endotoxemia could result. Endotoxins are powerful renal vasoconstrictors, and, therefore, evaluation of the relationship between systemic endotoxemia and renal failure is appropriate. Wilkinson's group, utilizing the limulus test, found that 15 of 19 patients with the HRS had a positive assay while only two of 20 cirrhotics without oliguria did so.[9] Unfortunately, the limulus test itself is embroiled in controversy regarding its dependability.[10] Endotoxin - induced renal failure is usually due to acute tubular necrosis (in Wilkinson's group, six patients clearly had ATN), and portasystemic shunting, which should lead to rampant endotoxemia, has been reported to reverse the HRS. For these reasons, a major role of endotoxins in the pathogenesis of the syndrome is unlikely.

Mashford's group noted hypotension, decreased peripheral resistance, a diminished response to tyramine administration and an enhanced response to endogenous norepinephrine in cirrhotics with azotemia and oliguria.[11] He therefore logically concluded that patients with the HRS behave as if they are norepinephrine-depleted. This has led to some interesting attempts at treatment of the syndrome with dopamine and L-dopa, norepinephrine precursors. This fascinating hypothesis is consistent with Fischer's false neurotransmitter theory in which inert amines, synthesized by a deranged hepatic function, may replace active amines such as norepinephrine or dopamine.[12] The liver serves as either the catabolic or anabolic organ for so many of these systems or agents that it is conceivable that profound disturbances in its function could lead to a myriad of interactions between these components. It is possible that no one system is at fault; instead, a complex interaction of some or several may disturb the kidney's hemodynamics.

Increased intraabdominal pressure has been shown in laboratory animals to decrease both the GFR and RPF. This concept has been supported in humans by the observations of Gordon, who found that the renal hemodynamic alterations of cirrhosis were reversed by paracentesis.[13] Remember, however, that this same procedure has been implicated as an etiologic factor in the syndrome. Some investigators have reported improvement in renal function after surgical decompression of the portal system and relief of ascites. A major flaw in the increased abdominal pressure explanation of the altered renal hemodynamics is that increments in renal venous pressure required experimentally to produce changes in RBF far exceed those actually observed in cirrhotics with ascites.[14]

The association of the HRS and hepatocellular failure is inferential, but the evidence for it is heavily weighted. Most patients with the HRS are jaundiced, have hypoalbuminemia, hypoprothrombinemia, elevated transaminases and ascites —conditions which indicate a severely deranged hepatic function. Such a disturbed hepatic function might predispose to the production of altered neurotransmitters or the inadequate detoxification of vasoactive toxins. The strongest argument, however, for the dependency of the renal findings on the hepatic environment is that the occasional patient who does survive almost invariably shows simultaneous improvement in liver function.

There are several rational proposals to explain the pathogenesis of the HRS, some very attractive, some less so: unfortunately, all can be questioned at some level. There may be an interaction of several of the above mentioned, and possibly other, mechanisms leading to oliguria and azotemia rather than any one clear explanation.

Therapy

The prognosis of the HRS is extremely poor and the treatment frustrating and usually unrewarding. Research in the treatment of severe hepatic dysfunction might prove more profitable than attempts to reverse the syndrome's renal component. Probably the most efficacious action that the physician can take when presented

with the HRS is to search aggressively for correctable causes of pre-renal azotemia. Too often, because of a sense of inevitability, the physician may accept the situation as hopeless, and leave untreated those few reversible etiologies.

Supportive therapy includes careful fluid and electrolyte management, and low-protein, high-carbohydrate diets to minimize azotemia and protein catabolism. Prevention or treatment of hepatic encephalopathy, search for and treatment of occult sepsis, cessation of diuretics, treatment of gastrointestinal bleeding, and the discontinuation of any drug that might alter renal hemodynamics or cardiac output all must be considered.

More specific therapeutic maneuvers include plasma volume expansion, paracentesis, paracentesis plus reinfusion of ascitic fluid, portacaval anastomosis, peritoneojugular shunting, exchange transfusions, corticosteroids, dialysis, and finally, pharmacologic treatment of the intrarenal shunting.

As noted, a small number of patients with the HRS will respond, at least transiently, to plasma volume expansion, and a careful trial of volume expansion is warranted in any patient in the initial stages of oliguria. Albumin, dextran or other colloid solutions are the fluids of choice, given the patient's hypoalbuminemic state.

Over a century ago Flint noted increased urine output in some cases after paracentesis;[15] furthermore, it has been shown that the cardiac output may increase post-paracentesis.[16] These must be repeated small aspirations—repeated because their effects are only transient, small because too large a volume of fluid removed will lower the ECF volume and consequently the cardiac output.

A logical extension of the above treatment modalities is paracentesis with removal and then reinfusion of ascitic fluid. Some patients respond to this, again usually only transiently, and its use is limited by the high risk of peritonitis.

Several case reports of reversal of the HRS with both portacaval anastomosis and peritoneovenous shunting are interesting. The latter is actually a more physiologic adaptation of paracentesis with reinfusion. The portacaval anastomosis is thought to work because of portal venous decompression. Again, here is an instance where a proposed treatment has itself been considered an etiologic factor; however, in those cases in which the HRS was reported following portacaval anastomosis, hepatic decompensation and, inevitably, the reaccumulation of ascites had developed.[17] It can be argued that relief of ascites, while maintaining plasma volume, favorably affects cardiac output and renal hemodynamics in these patients; still, surgical portal venous decompression may be a viable form of treatment for the disorder. Unfortunately, the procedure can only be done in those patients with enough liver function to tolerate major surgery.

Shunting of Questionable Value

The LaVeen-type chronic peritoneovenous shunt is a much less invasive procedure, and several anecdotal reports implicate its role in the reversal of seemingly terminal HRS. Kinney, *et al.* have shown its efficacy in improving the renal function indices of patients with Laennec's cirrhosis, ascites and azotemia, but without oliguria or the total syndrome.[18] Improvements in BUN, creatinine and the functional excretion of sodium were noted in 29 such patients after shunting. Fullen further reports two cases of the HRS reversed by peritoneojugular shunts,[19] and, in 1980, Schwartz and Vogel reported that four of five patients with the syndrome treated with peritoneovenous shunting responded with impressive improvement in renal function—two even survived.[20]

The most carefully done study to date, that by Schroeder, concludes that although improvement in renal function is clearly obtained, "the efficacy of these procedures in prolonging the survival of patients with the hepatorenal syndrome remains to be proven by controlled prospective study."[21] A careful review of the literature to date on the use of this surgical modality in the treatment of the hepatorenal syndrome casts serious doubt on the authors' patient selection, i.e., in the majority of cases the criteria for the syndrome were not strictly addressed or met. Only in Schroeder's series was any attempt at volume replacement considered; the majority of patients in the other quoted series were not clearly documented to have the hepatorenal syndrome.

Although renal function generally was noted enthusiastically to be improved post-shunting, actual survival was either not addressed or not improved. For these reasons, Epstein, in a recent summary regarding the chronic peritoneovenous shunt, concludes that despite the few well-documented cases in which the LaVeen shunt was clearly successful in reversing the syndrome, these do not justify our uncritical wholesale use of this modality, but, in contrast, argue all the more vigorously for further prospective clinical trials.[22]

Other Treatments Attempted

As in just about every terminal disease without a successful method of treatment, adrenocortical steroids have been employed empirically, with rationales for their use retrospectively devised.[23]

Exchange transfusions in the hope of reducing toxins or humorally-active substances have been attempted: their results are dismal.[24] To my knowledge, plasmapheresis, the more technical extension of this hypothesis, has never been attempted in the therapy of this syndrome.

In the largest series reported to date (14 patients studied by Parsons, *et al.* in 1975) mortality was universal in cirrhotic patients with the HRS treated with either peritoneal or hemodialysis.[25] Results were only slightly better in 22 patients studied with acute hepatic failure and the HRS—five showed partial improvement. It is not clear if improvement coincided with an improvement of hepatic function or not. Studies by Ring-Larsen,[26] Klingler and Cronin,[27] and Jacobsen and Bell[28] echo these results and fail to support the role of dialysis in the treatment of the HRS.

The most interesting and seemingly reasonable efforts at treatment have been the attempted pharmacologic manipulation of renal vasoconstriction. Numerous vasoactive agents have been employed. Several, including acetylcholine, phentolamine, papaverine, aminophylline, phenoxybenzamine, mannitol, angiotensin and isoproterenol, have been reported to be of no value and possibly harmful.

Some agents have shown promise. Cohn *et al.* found that phenylalanine-lysine vasopressin (octapressin), a synthetic vasopressin without ADH activity, caused a decrease in renal vascular resistance and an increase in RPF. They even found evidence by PAH extraction to support some reversal of the corticomedullary shift of RBF, and documented dramatic transient improvement in patients with the HRS.[29] Bennett *et al.* studied the use of intraarterial dopamine infusion in subpressor doses in seven patients with the HRS.[30] They noted an improvement in the angiographic appearance of the renal cortical vasculature and the cortical blood flow rate, but little to no improvement in the GFR and urine flow rate. Two of their patients did survive: both experienced concomitant improvement in their hepatic function as well. It would be helpful if some pharmacologic agent could be found which might buy time for liver function to improve. Obviously, further work is needed in this area.

Summary

To summarize, in its strictest definition, the HRS is a situation of pre-renal azotemia superimposed on terminal cirrhosis with ascites which has an extremely poor prognosis, and which usually responds not at all to treatment. Methods of treatment at present are aimed at reversal of the syndrome or at least at producing enough improvement in renal function to allow any possible hepatic improvement to occur. Unfortunately, unless the latter condition becomes reversible, the HRS will remain as mortal as other syndromes consisting of multiple-organ failure.

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Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

A short abstract summarizing the manuscript should be included. This should be typed in double space on a separate page.

Authors are requested to submit a carbon copy with the original.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for reproduction should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. Cost of printing black and white photos in excess of 4 will be billed to author, and no more than 25 references will be published free of charge to the author. A legend should be provided for each illustration and, preferably, attached to it.

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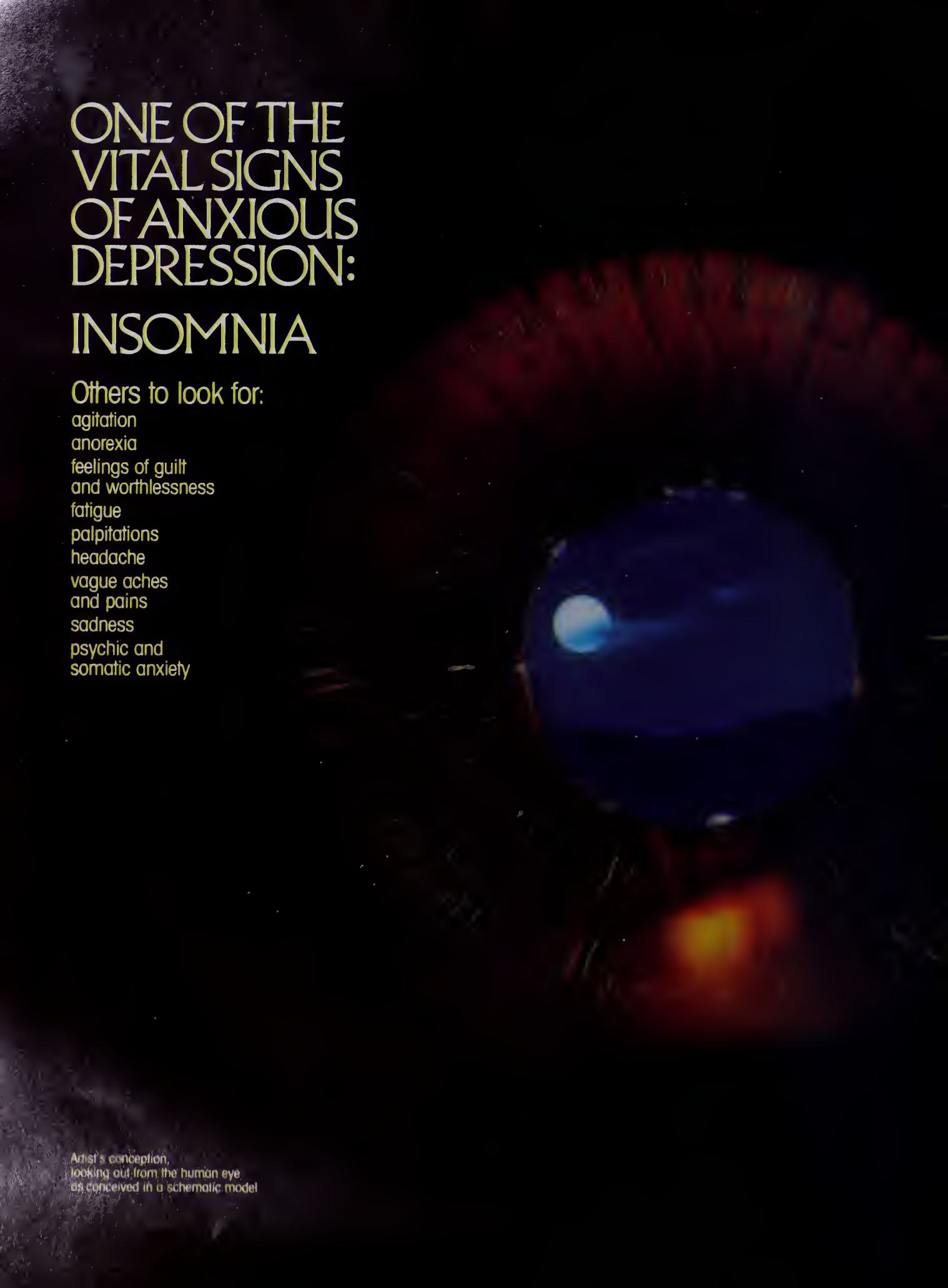

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Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients Periodic liver function tests and blood counts are recommended during prolonged treatment Amitriptyline component may block action of guanethidine or similar antihypertensives Concomitant use with other psychotropic drugs has not been evaluated sedative effects may be additive Discontinue several days before surgery Limit concomitant administration of ECT to essential treatment See Warnings for precautions about pregnancy Limbitrol should not be taken during the nursing period Not recommended in children under 12 In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects
Adverse Reactions: Most frequently reported are those associated with either component alone drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely
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Anticholinergic Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract
Allergic Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus
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Gastrointestinal Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue
Endocrine Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female and elevation and lowering of blood sugar levels
Other Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling
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Dosage: Individualize according to symptom severity and patient response Reduce to smallest effective dosage when satisfactory response is obtained Larger portion of daily dose may be taken at bedtime Single *h s* dose may suffice for some patients Lower dosages are recommended for the elderly Limbitrol 10-25, initial dosage of three to four tablets daily in divided doses, increased to six tablets or decreased to two tablets daily as required Limbitrol 5-12 5, initial dosage of three to four tablets daily in divided doses, for patients who do not tolerate higher doses
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PRESS RELEASE

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New Medicare Guidelines for Home Oxygen

1) Arterial blood gases must be done for all home oxygen patients. These studies must be done on room air and reflect a pO_2 of 62 or below.
2) Severe Chronic Congestive Heart Failure (CHF) will be the only acceptable cardiac diagnosis that will be considered.
3) Diagnostic classifications must fall in one of the following categories:

   A) Chronic Obstructive Lung Disease
      1) Limited to Emphysema, Chronic Bronchitis, and Bronchiectasis.
   B) Chronic Interstitial Pneumonia
   C) Chronic Interstitial Pulmonary Infiltrate-type Pulmonary Diseases such as Pulmonary Fibrosis from extensive Tuberculosis, Eosinophilia Granuloma, Idiopathic Fibrosis, and Pneumoconiosis.
   D) Pulmonary Hypertension
   E) Secondary Polycythemia

4) Medicare regulations specifically prohibit the coverage of pre-set stand-by or emergency oxygen.
5) Portable oxygen units will only be considered if the person is immobile without the use of mechanical oxygen.

If you have other questions concerning Medicare regulations, please call us. Thank You.

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The President

POLITICS AND DUTY

ELECTION day is almost upon us. We have listened critically to the candidates, weighed the issues, and are prepared to cast our ballots knowledgeably. Or have we? Have we instead been so engrossed in our professional problems of a rising BUN, a falling blood sugar, a non-resolving pneumonia or an acute MI that we have neglected our other duty to society? Some of us may even have been too busy "saving lives" to vote.

I have heard it said by some that politics is a matter our Association should not meddle with, that no matter what we do, it will not make a difference. I most strongly disagree. Our State Association, each component society and each one of us as an individual citizen should be involved in politics up to our elbows.

Decisions made in Washington, in Charleston, and in our city councils have an immediate and far-reaching impact on our lives and those of our patients. As concerned members of our community and our profession, committed to the good health of the public, we have an obligation to influence those decisions. By supporting candidates whose views we agree with: by having open, frank discussions with those whose views we oppose: by contributing, through WESPAC and individually, our money and efforts, and by educating our elected officials in matters pertaining to health care, we can make a difference. And, we must.

Our number is small, but our influence can be great if we but put forth the effort. Our duty is toward the good health of our patients, and the public demands that effort. By speaking out forcefully on issues that pertain to health care, and not our self interests only, we fulfill that duty.

Finally, after the election is over, let us remember, the duty—and the struggle—continue.

Harry Shannon MD

Harry Shannon, M. D., *President*
West Virginia State Medical Association

The West Virginia Medical Journal

Editorials

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COSTS AND CARE

What are other medical society leaders thinking about, and saying, around the country? Let's start with Richard F. Hench, M. D., Chairman of the Kentucky Medical Association's Board of Trustees, on a couple of key issues of the day:

"In addition to being a severe and fundamental problem, medical care cost is the cross on which our enemies plan to crucify us. The second problem is the ability or lack of ability of our profession to function effectively politically.

"For better or worse, government is in Medicine, and is in to stay. We must hammer out our differences among ourselves and then present a unified front in the political arena if our profession is to serve as we know it. . . "

Others have had some recent observations in this same general area:

"The message remains clear. The Federal Government wishes to reduce costs, and they want somebody else to take the blame. Let's watch those guys."—Durward M. Lang, M. D., South Dakota.

"Is it not time we truly analyze how much money we *should* spend on health care? The statement is frequently heard that health care costs should not exceed 10 per cent of the gross national product, but no study demonstrates that this estimate is correct. We should begin to face reality. We cannot have increasing technological advances without concomitant rising costs."—Charles E. Millard, M. D., Rhode Island.

"If one presumes that there is a limit to the number of dollars that can be spent for medical care, then when that limit is reached we in Medicine will have only two choices: either we will have to decrease the quality of medical care delivered to all, or we will have to maintain the same quality of care but deliver it to fewer people. That means patient selection. I hope I'm not around when that choice has to be made."—Michael I. Freilich, M. D., Los Angeles County, California.

"No one in American society has more of a vested interest in the maintenance of sound government and a stable economy than we who practice Medicine. The good things that we have learned to accept in this country did not happen by chance. A privileged, dedicated few worked after hours to make it a reality. We in Medicine are now among the privileged few. As physicians, it is up to us to help continue the legacy of the free society that we have inherited—after hours when necessary."—Charles D. Hollis, Jr., M. D., Georgia.

"I fully endorse cost containment efforts, but I am concerned about who might reap the benefits of such efforts. Would the savings be passed along to the consumer in the form of lower premiums when third-party carriers are involved? Or would non-profit carriers expand their holdings (HMOs, etc.) and private carriers increase dividends to stockholders? Would the savings to the government be passed on to taxpayers or would they be diverted to pay for increased defense expenditures? I believe we must continue our efforts to contain costs and see that the savings are passed on to patients." — Rafael A. Zaragoza, M. D., Delaware.

"The years just ahead will test the mettle of us and our organizations. The end of the 'Golden Age' of the free, fee-for-service practice of Medicine might be approaching—unless we are both wise and energetic enough to help the profession, the government and the public reach reasonable solutions to the incredibly complex problems facing all of us. We physicians, perhaps through apathy, have allowed some of these problems to develop. We certainly, however, have the knowledge and insight to help find constructive answers."—again, Georgia's Doctor Hollis.

And now for another outlook on things:

"I practice as I want to—at a snail's pace, enjoying each patient contact. I am doing what I want to do. I enjoy the small children as well as their senile great grandparents in nursing homes. In such practice, I find that many pa-

tients seem to get better, a few are cured and my patients and I enjoy our contact.

"I find my *inefficient* practice quite effective. So, why try to be *efficient?*"—L. A. Arata, M. D., Indiana.

THE FTC WAR

Amid budget and other controversy swirling about the Congress has been a highly significant and continuing effort to strip the Federal Trade Commission of its self-asserted jurisdiction over the medical and other professions. The battle first went well for the professionals in the Senate. The war, however, then slipped into stalemate with the outcome still highly uncertain at this writing.

Amid all this uproar, whose basic interests really and finally have been at stake? The patients' interests, of course. What Congress does must signal a major impact, when all the smoke clears, on delivery of quality medical care to the guys, the gals—and the children—needing and seeking it.

The government track record historically has been poor in managing from Washington the kinds of services embraced in the FTC controversy. There's certainly no reason to believe or expect that the FTC, as an overall regulator and pre-emptor of state's rights in the licensure, disciplining and regulation of professions, can do any better.

The full Senate Commerce Committee adopted in early May an organized medicine-supported amendment not only providing that the FTC shall not have jurisdiction over state-regulated professionals—but also prohibiting FTC preemption of state laws concerning the professions. Senate opponents then stalled a vote by that full body on the bill.

Final enactment of this type of legislation would have the effect of resolving an issue of FTC jurisdiction that the U. S. Supreme Court failed, by a 4-4 tie vote this spring, to decide. The Senate Committee vote in support of the critical amendment essentially said that there currently is adequate state regulation of professionals, through state licensing boards; and that the professions should be given the opportunity to discipline themselves.

The U. S. House of Representatives has had the issue of FTC regulation of professionals before it in a somewhat different form. More than 215 members of the House, including all four of West Virginia's representatives, have co-sponsored a bill to provide a moratorium on FTC jurisdiction over state-regulated professions. There, the struggle has continued.

At no time has organized medicine advocated exempting the professions from federal antitrust laws. West Virginia also has an antitrust statute. But the AMA has insisted that actions in federal courts by the U. S. Department of Justice, and by the states and private individuals in appropriate litigation, are the fair and effective means of dealing with such issues.

The FTC never has had, and should not have, jurisdiction to regulate the professions, organized medicine and others have insisted. The FTC was created in the very early years of this century to deal in areas of industrial and commercial business in which regulation by an administrative agency with business expertise was considered more desirable than judicial enforcement.

The whole issue became a matter of major concern in the mid-1970s through FTC action designed to prevent professional self-regulation, and in effect to regulate the practice of medicine. The AMA was subjected to the first FTC action concerning the learned professions when the Commission filed a complaint against it, the Connecticut Medical Society and New Haven County (Connecticut) Medical Society in general areas of advertising and contract practice.

When the U. S. Supreme Court divided 4-4 in the AMA case, it failed to decide the important issues presented in the long and expensive process of litigation relative to FTC jurisdiction over the professions. That left to the Congress the question of whether and to what extent the FTC should have authority to regulate the professions.

It was then that the AMA generated new strength for the amendment to the FTC statute to stop the five-member, non-elected Commission from preempting state laws; to limit overly broad subpoena powers of the FTC; to clarify what the AMA has called an unfair practice for the purposes of the FTC law; and to require the Commission to bring its actions in federal court before an impartial judge instead of an administrative proceeding before an FTC employee.

At stake for patients, again, has been their right to have qualified, experienced medical professionals, responsible for professional self-regulation that embraces a commitment to serve the public and improve the quality of life.

The war in Congress continued into mid-September. The outcome long will rank as most important.

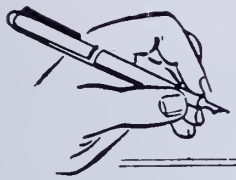
Pending the usual check and recheck, registration figures for the Association's 115th Annual Meeting at the Greenbrier in August indicate a substantial upswing in attendance. Physician registration appears to be the highest since 1977.

A GOOD MEETING

This was just the second year of the new, shortened meeting format, to three days instead of four. The Executive Committee discussed at some length whether this provides enough time to handle a complex and heavy schedule. The decision: the time indeed is short, but let's try this arrangement for at least a bit longer.

Thinking that led to the shortened meeting included a feeling that physicians might find it easier to get away from normally busy routines for shorter periods of time. That's perhaps reflected in this year's picture. There also seemed to be a larger number of younger physicians in general and other scientific sessions, and business meetings.

There's always room for more thought and input with respect to Annual Meeting planning. You might have individual ideas or preferences. The Association's leadership would be happy to hear about them.



Our Readers Speak

Are Birthing Centers Self-Defeating?

As a pediatrician in Wheeling, West Virginia, I am concerned about the perinatal mortality and morbidity in our state. In recent years, we have made great strides in improving the care we give to newborns and their mothers. We have met the challenge to provide better care and we are winning.

Organized obstetrics and pediatrics are now met with two additional challenges. First, we must do our best to cut costs and unnecessary, prolonged hospital stays. The federal government and third-party payers are pressuring us to do so. Secondly, we must provide warm and friendly care, realizing that birth is usually a joyful occasion. The traditional "operating room" setting may not be the ideal site of delivery for many individuals in our culture.

Because of these two challenges, birthing centers like the one described in the July, 1982, issue of *The West Virginia Medical Journal*[1] are being formed in an attempt to lower costs and expedite care in a humanitarian manner. While on the surface independent birthing centers seem like a good idea, I am concerned that they might be self-defeating.

The birthing center described in the *Journal* article made no mention of the care of the newborn except to say that they had good Apgar scores, no birth defects and were born alive. Yet the article implies that they are sent home as early as one hour of age. There is no indication that the recommendations of the American Academy of Pediatrics for "in and out deliveries" are followed.[2]

There are problems with such abbreviated birthing deliveries. Consider the following examples of problems which could have been detected earlier if the infants had been kept and checked in more detail in a hospital setting: an infant presenting at four days of age with a bilirubin of 28.8 mg. per cent and possible sepsis; another infant presenting at five days of age with a bilirubin of 29.2 mg. per cent and requiring transfer to a Level III center for treatment; and an infant presenting at three days of age with a central hematocrit of 67 per cent and requiring an immediate partial exchange transfusion. While the effects of polycythemia are controversial, no one can argue the overt and subtle complications of hyperbilirubinemia.

Considering the expense of caring for such infants and the possibility of future disabilities, are we really saving money? Could not the comfort afforded the mothers and infants in an independent birthing center be developed within the confines of a hospital? Gordon B. Avery, M. D., Ph.D., in his recent textbook, *Neonatology*, states:

> "There is room for innovation and change in the delivery setting and practice, particularly with regard to the low-risk pregnancy. There seems to be no reason to situate "alternate birthing centers" outside hospitals, particularly in view of the relatively frequent recourse which may have to be made to conventional facilities, even for selected low-risk pregnancies. In one recent experience of an alternative birthing center, 23 per cent of the first 500 births to low-risk mothers required such referrals."[3]

Doctor Avery is referring to the experience of Rebecca Ballard, M. D., in the in-hospital alternative birthing center at Mt. Zion Hospital in San Francisco.

I have spoken with David Z. Myerberg, M. D., a neonatologist, and Assistant Professor of Pediatrics and Neonatology at the West Virginia University Medical Center. He shares the concerns reflected in this letter. Our sincere hope is that we do not trade the advances we have made in perinatal medicine in the State of West Virginia for short-term economic benefits, comforts and convenience.

1. Vincent A. Sullivan M: A small-town independent birthing center. *W Va Med J* 1982; 78-157.
2. *Hospital Care of Newborn Infants*, ed 6, Evanston, IL, American Academy of Pediatrics, 1977, pp 84-85.
3. Avery G: *Neonatology*, ed 2, Philadelphia, JB Lippincott Co, 1981, p 25.

Charles H. Staab III, M. D.
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Question Should Be Researched

RE: President's Page, "Three?" [July issue of *The Journal*]

One hopes that the West Virginia [State] Medical Association will carefully research the question before making a stand on the issue of the need for three medical schools in the state.

Such research should include:

1. Identification of the state physician manpower requirements.
2. The past record of the medical school in supplying those requirements.
3. The cost to the state of producing each individual physician from that school.
4. The population base at the site of the medical center in regard to the availability of teaching material and the effect of the school on the health care system.

Opinions should not be based on past or present medical school affiliations, political affiliations, etc.

J. Michael Seddon, M. D.
Chief, Division of Urology
Department of Surgery
Marshall University School of Medicine

GENERAL NEWS

Doctor Shannon New President Of Medical Association

Doctor Harry Shannon of Parkersburg, a urologist, has assumed duties as the new President of the West Virginia State Medical Association.

Doctor Shannon was installed as President by Dr. John B. Markey of Charleston, the retiring President, at the concluding session of the House of Delegates on Saturday, August 28, during the 115th Annual Meeting of the Association at the Greenbrier in White Sulphur Springs.

The convention began with a meeting of the Council on Thursday, August 26. The official Medical Association registration totaled 393 and included 351 physicians, up from a total registration of 339, with 299 physicians, in 1981. Auxiliary registration was 140.

Doctor Markey presided at the Thursday and Saturday sessions of the House. He automatically became Chairman of the Council for the new Association year, succeeding L. Walter Fix of Martinsburg.

Elevated to President Elect from Vice President was Dr. Carl R. Adkins of Oak Hill, a family physician, who will be installed as President during the 1983 Annual Meeting, scheduled at the Greenbrier next August 25-27.

Doctor Roncaglione Vice President

Dr. Carl J. Roncaglione, a South Charleston orthopedic surgeon, was elected Vice President, and Dr. George A. Shawkey of Charleston, a pediatrician, was re-elected Treasurer.

Dr. Harry S. Weeks, Jr., of Wheeling was elected to a two-year term as a Delegate to the American Medical Association, with Dr. Joseph A. Smith of Dunbar elected as Alternate Delegate.

Three new Council members were elected, with eight other physicians re-elected to two-year terms. There being no successor nominated for Dr. William L. Mossburg of Fairmont (District II), who was not eligible for re-election, President Shannon will appoint the Councilor for that vacancy to serve until the 1983 Annual Meeting.

The three new Councilors are Drs. L. Mildred Williams of Charles Town, Jean P. Cavender of Charleston and Norman Wayne Taylor of Beckley.

Re-elected were Drs. D. L. Latos of Wheeling, George A. Curry of Morgantown, Nabal B. Giron of Romney, Robert R. Rector of Elkins, Michael J. Lewis of St. Marys, Thomas F. Scott of Huntington, Sherman E. Hatfield of Charleston, George W. Hogshead of Nitro, and Diane E. Shafer of Williamson.

Holdover Councilors whose terms will expire in 1983 are Drs. Antonio S. Licata of Weirton, Roland J. Weisser, Jr., of Morgantown, Cordell A. de la Pena of Clarksburg, John A. Mathias of Buckhannon, Winfield C. John of Huntington, Joseph T. Skaggs of Charleston, and T. Keith Edwards of Bluefield.

The Council now is composed of 23 members from the 14 districts instead of 19 as previously

Carl R. Adkins, M. D.
President Elect

as a result of constitution and by-laws provisions for additional representation as Council districts grow in membership.

Under the terms of the Association's Constitution, Doctor Fix, the Council Chairman last year, becomes Councilor-At-Large for 1982-83; and Dr. Stephen D. Ward of Wheeling, the Association President three years removed, will serve as Junior Councilor during the period.

Resolutions Adopted

The House adopted a resolution expressing Association concern regarding physician and other vacancies on the West Virginia Board of Medicine; and calling on Governor John D. Rockefeller IV to "give high priority" to board appointments and other executive-branch steps necessary to implement the state's medical practice act as rewritten by the 1980 Legislature.

Two other resolutions also were adopted—one urging continued Association efforts in the area of legislation dealing with professional liability, and the other calling on Congress to support a "fiscally responsible" federal budget.

The House also adopted a by-laws amendment to provide physicians in their first year of practice a 50-per cent reduction in annual dues.

Introduced into the House, and held over as required for final consideration in 1983, was a constitutional amendment to make residents in their first year of approved training eligible for Association membership. A by-laws amendment to implement that change also will be up for final action next August.

Under current state law, those first-year residents are not eligible for licensure (they work under an educational training permit issued by the West Virginia Board of Medicine), and thus also are not now eligible for Association membership pending licensure. (See separate stories on resolutions and amendments to by-laws and constitution elsewhere in this issue of *The Journal.*)

Native of Arkansas

A native of Star City, Arkansas, Doctor Shannon received a B. A. degree in chemistry from Hendrix College in Conway, Arkansas, before being awarded an M. D. degree in 1968 from the Tulane University School of Medicine in New Orleans.

After an internship at the City of Memphis Hospital in Tennessee, Doctor Shannon was a flight surgeon with the U. S. Air Force, holding the rank of captain and serving for two years at Clark Air Force Base in the Philippines.

He then had a one-year residency in surgery at the University of Arkansas in Little Rock,

Some of the new or re-elected officers and Councilors of the State Medical Association are shown at the conclusion of the 115th Annual Meeting of the Association August 26-28 at the Greenbrier in White Sulphur Springs. Seated, from left, are Drs. Carl J. Roncaglione, South Charleston, Vice President; Harry Shannon, Parkersburg, President; Carl R. Adkins, Oak Hill, President Elect, and John B. Markey, Charleston, immediate Past President and now Chairman of the Council; standing, from left, Drs. Joseph A. Smith, Dunbar, American Medical Association Alternate Delegate; George A. Curry, Morgantown, re-elected Councilor; Harry S. Weeks, Jr., Wheeling, AMA Delegate, and George A. Shawkey, Charleston, re-elected Treasurer.

followed by a residency in urology at the University of Missouri in Columbia under Dr. Ian M. Thompson.

Doctor Shannon entered practice in Parkersburg in 1975 with Parkersburg Medical Associates, and has continued that affiliation. He is the immediate Past President of the Medical Staff at Camden Clark Memorial Hospital and the current Chairman of the Executive Committee.

Elected to a two-year term on the Medical Association's governing Council in 1978, Doctor Shannon then was elected Vice President in 1980 and President Elect in 1981. He also has served on a number of Association committees, including those on long range planning and legislation, and as Chairman of the State Association's American Medical Association-Education and Research Foundation Committee.

Doctor Shannon is a Diplomate of the American Board of Urology; a Fellow of the American College of Surgeons; a member of the Mid-Atlantic Section, American Urological Association, and the AUA: and of the West Virginia State Urological Society. He is married to the former Judith Lynn Learned of Memphis, and they are the parents of three sons, Lee, Andrew and Jonathan.

Doctor Adkins, beginning in 1978, was elected to two terms on the Association's Council. He is a member of the Association's Legislative Committee, the Ad Hoc Committee on Audit and Budget, and the Marshall Medical Liaison Special Committee.

WVU Graduate

A native of Holden, he received his undergraduate degree from West Virginia University and his M. D. degree from WVU in 1972. He interned at Roanoke (Virginia) Memorial Hospital.

Doctor Roncaglione, born in Oak Hill, was Chairman of the 1982 Annual Meeting Program Committee. In 1981-82, he also served as Chairman of the Association's State Workmen's Compensation Sub-Committee of the Medical Economics Committee; and as a member of the Medical Aspects of Sports Committee.

The new Vice President, who served two terms on the Association's Council (1974-80), was graduated from Emory and Henry College. He received his M. D. degree in 1951 from the Medical College of Virginia.

Checks were given to Drs. Robert H. Waldman, Acting Dean, West Virginia University School of Medicine, and Robert W. Coon, Vice President and Dean of Marshall University School of Medicine, during the first House session. Doctor Markey asked Mrs. Logan W. Hovis of Vienna, 1981-82 President of the Auxiliary to the State Medical Association, to present the checks ($16,669.90 for WVU and $15,589.81 for MU) to Doctors Waldman and Coon. The checks represented an annual contribution by West Virginia physicians and the Auxiliary to the medical schools through the Education and Research Foundation of the AMA (AMA-ERF).

Dr. Edward N. Brandt, Jr., M. D., Ph.D., Assistant Secretary for Health, U. S. Department of Health and Human Services in Washington, D. C., addressed physicians during opening exercises preceding the first general scientific session on Friday morning.

October Program On Violence Planned In Charleston

"Violence in the Clinical Setting," a program designed for physicians and nurses working in the medical setting as well as for mental health providers, will be held in Charleston, October 21-22.

The West Virginia University Medical Center Education Building will be the meeting site.

The day-long program on Thursday, October 21, will be conducted by Dr. John R. Lion, Professor of Psychiatry at the University of Maryland. Doctor Johnson presently serves on the editorial staffs of *The Journal of Nervous and Mental Disease* and *The Journal of Clinical Psychiatry*. In addition, he is the editor and/or author of five books, including *Evaluation and Management of the Violent Patient*.

Presenting the concluding Friday morning session, from 8:30 to noon, will be Martin Samuels, M. S., Director of the Children's Psychiatric Inpatient Services at St. Francis Hospital in Pittsburg; and Daniel Davison, B.S., Child Care Coordinator of the Child and Adolescent Psychiatric Inpatient Services at the hospital.

Program objectives are to help participants evaluate the potentially dangerous patient and underlying causes of violence; and to identify characteristics of the potentially violent patient, with appropriate intervention techniques.

Sponsors are Charleston Area Medical Center, WVU Charleston Division, and Highland Hospital, Charleston.

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1982, as compiled by Dr. Robert L. Smith, Assistant Dean for Continuing Education, and J. Zeb. Wright. Ph. D., Coordinator, Continuing Education, Department of Community Medicine, Charleston Division. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of The Journal.)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Morgantown, Charleston and Wheeling campuses. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, 3110 MacCorkle Avenue, S. E., Charleston 25304; Office of Continuing Medical Education, WVU Medical Center, Morgantown 26506; or Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

The remaining schedule of CME topics for the Saturday morning football weekend sessions to be presented at the WVU Medical Center in Morgantown (with the football game designated in parentheses) is as follows:

Oct. 9 (Boston College-Homecoming), Follow-up of Abnormal Pap Smear. Helping Parents Cope with Perinatal Death. Sexuality and Pregnancy (final day of OB/GYN Teaching Days)

Oct. 23 (Penn State), Orthopedics for the Family Practitioner (final day of 8th Annual Hal Wanger Family Practice Conference)

Oct. 30 (East Carolina), Trigeminal Neuralgia, Maxillofacial Injuries, Common Skin Diseases

Nov. 20 (Syracuse), Sports Medicine Topics (final day of 3rd Annual Sports Medicine Symposium)

For your planning, following is a list of the remaining conferences associated with the Football Weekend Continuing Medical Education offerings:

Oct. 8-9, OB/GYN Teaching Days

Oct. 21-23, 8th Annual Hal Wanger Family Practice Conference

Nov. 19-20, 3rd Annual Sports Medicine Symposium

Oct. 16, Charleston, Occupational Health 1982

Oct. 21-22, Charleston, Violence in the Clinical Setting

Nov. 5-6, Morgantown, Diagnostic Ultrasound Update

Nov. 5-6, Morgantown, Suspected Brain Damage: An Introduction to Early Intervention

Nov. 8., Charleston, Pastoral Care

Nov. 15, Charleston, A New Look at Alcoholism: Second Annual Conference, Medicine & Ministry in Cooperative Patient Care

Regularly Scheduled Continuing Education Outreach Programs from WVU Medical Center/ Charleston Division

Buckhannon, St. Joseph's Hospital, 3rd floor, 3rd Thursday, 7-9 P. M.—Oct. 21, "Lower Back Injury" (a program in cooperation with the Workmen's Compensation Fund), Justus C. Pickett, M. D., Judy Greenwood, Ph. D., and John Farley.

Nov. 18, "Quality Control/Medical Malpractice in WV" (a special program in cooperation with the WV State Medical Assn.), Carl R. Adkins, M. D.; Fred Bockstahler, J. D., and Tom Auman, M. Ed.

Cabin Creek, Cabin Creek Medical Center, Dawes, 2nd Wednesday, 8-10 A. M.—Oct. 13. "Pediatric Rheumatology," John W. Byrd, M. D.

Nov. 10, "Evaluation & Treatment of Depression," Sidney Lerfald, M. D.

Gassaway, Braxton Co. Memorial Hospital, 1st Wednesday, 7-9 P. M.—Oct. 6, "Sudden Infant Death Syndrome: Implications for Rural Practitioners," David Z. Myerberg, M. D.

Madison, Allied Health Room, Boone Career Center, West Madison, 2nd Tuesday, 7-9 P. M.

(continued on next page)

Oct. 12, "Pulmonary Function Evaluation," Bipin Avashia, M. D.

Oak Hill, Oak Hill High School (Oyler Exit, N 19) 4th Tuesday, 7-9 P. M.—Oct. 26, "Approach to the Peripheral Vascular Patient," Robert Leadbetter, M. D.

Nov. 23, "Lower Back Injury" (a program in cooperation with the Workmen's Compensation Fund), Robert Ghiz, M. D.; Judy Greenwood, Ph. D., and John Farley.

Welch, Stevens Clinic Hospital, 3rd Wednesday, 11 A. M.-1 P. M.—Oct. 20, "Sudden Infant Death Syndrome: Implications for Rural Practitioners," David Z. Myerberg, M. D.

Nov. 17, "Quality Control/Medical Malpractice in WV" (a special program in cooperation with the WV State Medical Assn.), Thomas Potterfield, M. D.; Fred Bockstahler, J. D., and Tom Auman, M. Ed.

Whitesville, Raleigh-Boone Medical Center, 4th Wednesday, 11 A. M.-1 P. M.—Oct. 27, "Renal Deficiencies," Mary Lou Lewis, M. D.

Williamson, Appalachian Power Auditorium, 1st Thursday, 6:30-8:30 P. M.—Oct. 7, "Sudden Infant Death Syndrome: Implications for Rural Practitioners," David Z. Myerberg, M. D.

Nov. 4, "Common Intestinal Parasites in West Virginia," Kevin Tu, Ph. D.

Sports Champions Crowned At Annual Meeting

Dr. William C Morgan of Charleston won the State Medical Association Golf Tournament trophy with the low gross score in annual competion held in conjunction with the Association's 115th Annual Meeting at the Greenbrier in August.

In tennis competition, limited to doubles play, Drs. Maurice A. Mufson of Huntington and Jose Oyco of Beckley made up the winning team, with Drs. Prospero B. Gogo of Beckley and Alberto G. Capinpin of Charleston second, and the team of Drs. Jacques Charbonniez of Charleston and I. F. Salon of Daniels third.

The women's golf tournament was rained out. Results of the women's tennis competition were not available.

Mrs. Richard S. Kerr Installed As Auxiliary President

Mrs. Richard S. Kerr of Morgantown assumed the presidency of the Auxiliary to the West Virginia State Medical Association at the group's 58th Annual Meeting at the Greenbrier in White Sulphur Springs, August 26-28.

Mrs. Richard S. Kerr

Mrs. Kerr was installed by Mrs. Torrence P. B. Payne of Newburgh, New York, President of the Auxiliary to the American Medical Association, who was an honor guest.

Mrs. Kerr's husband is an obstetrician-gynecologist.

The Auxiliary elected Mrs. T. Keith Edwards of Bluefield as President Elect and the following additional officers:

Mrs. Harry S. Weeks, Jr., Wheeling, Vice President; Mrs. Charles C. Weise, Charleston, Recording Secretary; Mrs. Charles M. Davis, Jr., Morgantown, Corresponding Secretary; Mrs. Harvey D. Reisenweber, Martinsburg, Treasurer; Mrs. J. L. Mangus, Charleston, Parliamentarian;

Shown above are some of the new officers of the Auxiliary to the State Medical Association elected during the Auxiliary's annual meeting in August. Seated, from left, are Mrs. Harry S. Weeks, Jr., Wheeling, Vice President; Mrs. Richard S. Kerr, Morgantown, President; Mrs. T. Keith Edwards, Bluefield, President Elect, and Mrs. Harvey D. Reisenweber, Martinsburg, Treasurer; standing, from left, Mrs. Charles C. Weise, Charleston, Recording Secretary; Mrs. Jose M. Serrato, South Charleston, Central Regional Director; Mrs. Thomas W. Crosby, Morgantown, Eastern Regional Director, and Mrs. Antonio S. Licata, Weirton, Northern Regional Director.

Mrs. Antonio S. Licata, Weirton, Northern Regional Director; Mrs. Thomas W. Crosby, Morgantown, Eastern Regional Director; Mrs. Mario Cardenas, Princeton, Southern Regional Director; Mrs. William M. Jennings III, Huntington, Western Regional Director, and Mrs. Jose M. Serrato, South Charleston, Central Regional Director.

Mrs. Kerr also announced these appointments of committee chairmen:

Mrs. T. Keith Edwards, Bluefield, Membership; Mrs. William J. Echols, Huntington, Members-at-Large; Mrs. Herman Fischer, Bridgeport, AMA-ERF; Mrs. Robert S. Robbins and Mrs. John W. Kennard, both of Wheeling, Health Projects; Mrs. M. V. Kalaycioglu, Shinnston, Shape Up For Life; Mrs. Harry S. Weeks, Jr., Wheeling, Liaison to the Physician's Service Committee; Mrs. Michael J. Lewis, Belmont, Legislation; Mrs. Charles E. Turner, Huntington, News Bulletin Editor; Mrs. Harry K. Tweel, Huntington, News Bulletin Circulation; Mrs. J. L. Mangus, Charleston, and Mrs. D. Sheffer Clark, Huntington, Long Range Planning; Mrs. D. Sheffer Clark, Huntington, Finance; Mrs. Logan W. Hovis, Vienna, Convention, and Past President on the Board; Mrs. Gary G. Gilbert, Huntington, By-laws and Handbook; Mrs. Roger E. King, Morgantown, Press and Publicity (Scrapbook); Mrs. J. Dennis Kugel, Charleston, Archives and Historian; Mrs. George A. Shawkey, Charleston, Necrology; Mrs. Harry S. Weeks, Jr., Wheeling, WESPAC; Mrs. Winfield C. John, Huntington, Southern Medical Councilor; Mrs. George A. Curry, Morgantown, Southern Medical Vice Councilor; Mrs. Herbert E. Warden, Morgantown, RP/MS Spouse Liaison—Charleston, Mrs. T. Ray Perrine; Huntington, Mrs. Donald S. Robinson; Morgantown, Mrs. Anthony G. DiBartolomeo, and Wheeling, Mrs. Jeffery S. Schultz; and Mrs. L. Walter Fix, Martinsburg; Mrs. George Naymick, Newell, and Mrs. Logan W. Hovis, Vienna, Health Careers Loan Fund.

Mrs. Kerr (Linda) is a native of Morgantown, and was graduated from West Virginia University. She taught geography and English at Morgantown High School while her husband was in medical school.

The Kerr's spent a year in Huntington for his internship, then three years in Morgantown for a residency. The Army assigned them to Ft. Eustis, Virginia, in Newport News for two years.

Linda's career as an active medical spouse began with membership in Caduceanns and serving as its President while her husband was in medical school. Then she was active in the House Staff wives at WVU and the "MEDAC"

Dr. William Y. Rial (left) of Swarthmore, Pennsylvania, President of the American Medical Association, is shown in the left photo with Dr. John B. Markey, Charleston, 1981-82 President of the State Medical Association. Doctor Rial addressed the first session of the State Association's House of Delegates during the Association's Annual Meeting in August in White Sulphur Springs. On the right are, from left, Dr. Robert H. Waldman, Acting Dean, West Virginia University School of Medicine; Doctor Markey; Mrs. Logan W. Hovis, Vienna, 1981-82 President of the Auxiliary to the State Medical Association, and Dr. Robert W. Coon, Vice President and Dean of Marshall University School of Medicine. During the first House session, Doctor Markey asked Mrs. Hovis to present checks to Doctors Waldman and Coon ($16,669.90 for WVU and $15,589.81 for MU). The checks represent an annual contribution by West Virginia physicians and the Auxiliary to the medical schools through the Education and Research Foundation of the AMA (AMA-ERF).

wives at Ft. Eustis (of which she also served as President).

She has held many positions in the medical Auxiliary, including county President, state Regional Director, News Bulletin Editor, and Vice-President before becoming President Elect.

The Kerrs have two daughters, Trudy Lynn and Amy Kay, ages 13 and 12.

For the past few years, Linda has been active in many children-related activities including Scouts, Swim Club, PTA, horseback riding, and basketball. She is an active member of Wesley United Methodist Church, Alpha Xi Delta Sorority, and the Morgantown Alumnae Panhellenic Council (of which she is now President). She also is a life member of the Monongalia General Hospital Auxiliary.

Hal Wanger Family Practice Program October 21-23

A variety of some 15 medical subjects will be discussed during the eighth annual Hal Wanger Family Practice Conference October 21-23 in Morgantown.

The meeting site will be the West Virginia University Medical Center Auditorium, with WVU faculty members presenting the scientific program.

Sponsors are the WVU Department of Family Practice, the WVU Office of Continuing Medical Education, and the West Virginia Chapter of the American Academy of Family Physicians.

Discussion subjects will include hand infections; thyroid disease management; alternatives to joint replacement; pediatric oncology; painless vision loss; cerebral vascular insufficiency; abdominal trauma; ocular emergencies;

angioplasty and streptokinase infusion in coronary disease; newborn cretinism; calcium channel antagonist; proteinuria; coin lesion; female sexual dysfunction, and sudden infant death syndrome (SIDS).

Also scheduled are "Ophthalmologic Skills for the Family Physician," a hands-on demonstration and practice in the use of the ophthalmoscope, slit lamp and tonometry; and an orthopedic workshop, a hands-on "practicum" in the use of plaster and synthetic casting material for common fractures and sprains.

The conference meets the criteria for 17 hours of credit in Category 1 of the Physician's Recognition Award of the American Medical Association; is acceptable for 17 hours by the American Academy of Family Physicians; and is approved for 1.7 WVU continuing education units.

'Opportunity of Communication' Theme of New President

Harry Shannon, M. D., of Parkersburg told the Medical Association House of Delegates, in brief remarks following his August 28 installation as President, that his main theme in the 1982-83 year would be the "Opportunity of Communication . . . Communication among ourselves, with our patients, with the media and the Legislature."

He said that the more lines of communication "we can open, the easier it will be to resolve any differences and to achieve our goal of the highest quality of care for our patients in West Virginia."

Here are other points emphasized by Doctor Shannon:

"It is not enough . . . to deliver quality medical care in a cold, robot-like fashion. There is too much in the media of the image of the greedy, money-hungry, uncaring doctor. To some extent, the public has succumbed to this image. It should be the opportunity of the State Medical Association to reverse this. We must re-educate the public, with cooperation from the media, that the vast majority of our physicians care first about their patients, and not about their pocketbooks. . ."

Doctor Shannon called for strong Association support of the West Virginia Board of Medicine, adding: "If we intend to show the public we are as concerned about quality care as indeed we are, then we must demonstrate that concern. The Board is not 'out to get' physicians. Its job is to help us police our ranks so that those who are a danger to our patients are not allowed to practice in our state or elsewhere."

"Finally, I would issue an invitation to the foreign medical graduates in our Association to become more involved. The Association is not, and should not be, a 'club' for American Medical graduates. Admittedly, there have been inequities and discrimination in the past. That time should be over and done with. We have too many similarities to allow minor differences to divide us. We are all physicians," Doctor Shannon stressed.

Joint, Lens Replacement Mid-Winter Subjects

Joint replacement and lens replacement will be among subjects discussed during the 16th Mid-Winter Clinical Conference to be held in Charleston next January 21-23.

The new Charleston Marriott Hotel, located at 309 Lee Street, East, will be the conference site.

The annual continuing medical education event is sponsored by the State Medical Association and the Marshall University and West Virginia University Schools of Medicine.

The paper on joint replacement will be presented by Dr. J. David Blaha, Assistant Professor, Department of Orthopedic Surgery, and Chief, Section of Arthritis Surgery, West Virginia University Medical Center.

Dr. George W. Weinstein, WVU Professor and Chairman, Department of Ophthalmology, will make the presentation on lens replacement.

Doctor Blaha will speak during the Saturday morning, January 22, session: Doctor Weinstein, during the Sunday morning session.

The conference will open Friday afternoon, January 21, and end at noon on Sunday.

In all, some 12 physicians are scheduled to speak, with other subjects to include vaccines in the treatment of hepatitis; herpes; sports medicine; trauma transport; new developments in prenatal diagnosis; genetics-immunodeficiency diseases; pediatric nephrology; psychiatric drugs and antidepressants; and channel blockers.

J. David Blaha, M. D.

George W. Weinstein, M. D.

Quality Control-Malpractice

"Quality Control in Medicine (Defense Against Malpractice)" will be the topic of discussion by a speaker to be announced, and by a panel, for the Friday evening physicians' session.

A public session on sports medicine will be held concurrently with the physicians' session Friday evening.

Dr. Robert H. Waldman of Morgantown, WVU Professor of Medicine and Acting Dean, School of Medicine, as announced previously,

Dr. Edward N. Brandt, Jr., Assistant Secretary for Health, U. S. Department of Health and Human Services, Washington, D. C., delivered the Thomas L. Harris Address during opening exercises of the State Medical Association's Annual Meeting in August. Doctor Brandt (right) is shown in the left photo being greeted by Dr. Carl J. Roncaglione, South Charleston, 1982 Annual Meeting Program Committee Chairman and currently Association Vice President. On the right are the speakers for the first general scientific session, a "Symposium on Common Disorders of the Eye, Ear and Mouth." They are, from left, Drs. Larry Schwab, Morgantown; Malcolm D. Graham, Ann Arbor, Michigan; Theodore P. Werblin, Bluefield (also the moderator); and J. E. Bouquot, D.D.S., M.S.D., Morgantown.

will speak on diagnostic tests in hepatitis during the opening session Friday afternoon.

Doctor Blaha, prior to his present post, was a lecturer in orthopedic surgery at London Hospital Medical College in England and, earlier, attending surgeon at Marshfield Clinic and St. Joseph's Hospital in Marshfield, Wisconsin.

Currently Vice President of the State Medical Association's Section on Orthopedic Surgery, he has made a number of local, national and international scientific presentations, and is the co-author of some 10 articles.

Doctor Blaha was graduated from the University of Notre Dame, and received his M. D. degree in 1973 from the University of Michigan, also taking his postgraduate training there.

He is a member of the Society for Research into Adult Reconstructive Surgery, London, England, and the Orthopedic Research Society.

Texas Teaching Posts

Doctor Weinstein has held his present position since 1980, haivng held previous teaching posts at the University of Texas Medical School at San Antonio; Johns Hopkins University and Georgetown University.

He has been Editor-in-Chief of *Ophthalmic Surgery* since 1971. Among a number of other current and past appointments are those as Director, American Board of Ophthalmology; Board of Trustees, Association of University Professors of Ophthalmology; American Academy of Ophthalmology, Director-At-Large; American College of Surgeons, Board of Governors; Secretary-Treasurer, Association of University Professors of Ophthalmology; Board of Governors, American College of Surgeons, and Secretary and Representative for Program, American Medical Association Section Council on Ophthalmology.

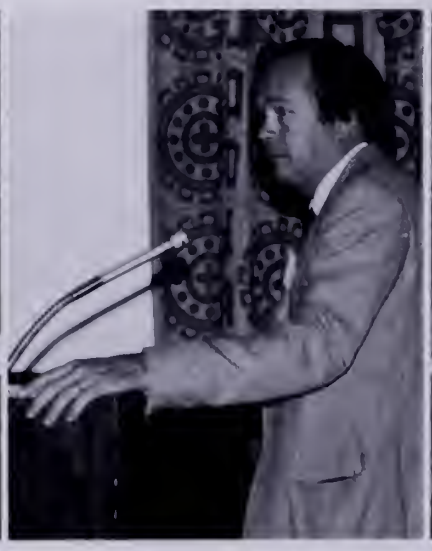
Born in East Orange, New Jersey, Doctor Weinstein was graduated from the University of Pennsylvania, and received his M. D. degree in 1959 from Downstate Medical Center, State University of New York. He completed postgraduate training and fellowships there and at Waterville, Maine; at Wilmer Ophthalmological Institute of Johns Hopkins University, and at the National Institute of Neurological Diseases and Blindness.

Doctor Weinstein is the author or co-author of 50 scientific publications.

14 Credit Hours

The program meets the criteria for 14 hours of credit in Category 1 of the Physician's Recognition Award of the American Medical Association, and also is expected to be approved for Prescribed credit by the American Academy of Family Physicians.

A registration fee of $50 will be charged all registrants except nurses, medical students, in-



In the left photo is Dr. D. Verne McConnell (left), Wheeling, who spoke on plastic surgery during the second general scientific session of the State Medical Association's August Annual Meeting. With him is Dr. David Z. Morgan, Morgantown, moderator. Other second-session speakers were Drs. James R. Andrews (center), Columbus, Georgia, whose subject was arthroscopic surgery, and Ralph O. Dunker, Jr. (right), Morgantown, who discussed neurosurgery. Not shown is Dr. Henry A. Wise II, Columbus, Ohio, a speaker on urology for the session.

terns and residents. For advance registration, make checks payable to West Virginia State Medical Association, and mail to the Association at P. O. Box 1031, Charleston 25324.

The Charleston Marriott is holding a block of rooms for conference attendees, and reservations should be made by January 3. Those who register in advance will receive from the Association a postage-paid Marriott reservation request card. Persons making reservations directly with the hotel—in order to receive group rates—should specify that they will be attending the Mid-Winter Clinical Conference.

Members of the Program Committee are Drs. Joseph T. Skaggs, Chairman; William O. McMillan, Jr., and C. Carl Tully, all of Charleston; Richard G. Starr, Beckley; Maurice A. Mufson, Huntington, and Robert L. Smith, Morgantown.

Lecture On Informed Consent Scheduled At Law School

"Informed Consent in Law and Medicine" will be the general title for two presentations and a panel discussion on Saturday, October 30, at the West Virginia University College of Law. The program will be held from 9 A.M. to 11:45 A.M.

The opening talk will be "The Cross Decision — A Revolutionary Development in Medical Malpractice?," by Frederick P. Stamp, Esq., of Wheeling; followed by "A Doctor's View of Informed Consent," by G. Robert Nugent, M. D., WVU Chairman, Department of Neurosurgey.

The concluding panel will be entitled "Lawyers and Doctors: Where Do We Go From Here?," moderated by Michael J. Farrell, Esq., of Huntington, Chairman, State Bar Committee on Law and Medicine. Panelists will be Stamp, George A. Daugherty, Esq., of Charleston, and Doctor Nugent.

The lecture is being held in conjunction with the WVU home football game (East Carolina) on that date. A pre-game buffet will be available at the College of Law.

The lecture registration fee of $30 includes the lunch and parking.

For additional information, contact Jessica Justice Howard in Morgantown (phone 293-5306) or Mark P. Smith in Charleston (phone 348-2456).

New Marshall Medical Facilities Dedicated In September

Appearances by Governor John D. Rockefeller IV, Senator Jennings Randolph and national Veterans Administration official Earl Brown, M. D., highlighted a joint celebration by the VA and the Marshall University School of Medicine in Huntington on September 10.

The event included the dedication of the School's $9.3 million Medical Education Building and the VA Medical Center's $11 million West Wing, both located at the same Huntington site. There were remarks by Randolph and Rockefeller, and an address by Doctor Brown, who is Associate Deputy Chief Medical Director at the VA's Washington office.

"The completion of the Medical Education Building obviously is a great stride forward for the School of Medicine," said Dean Robert W. Coon, M. D. "We now have ideal facilities for providing classroom teaching for our students, as well as much-superior research space for faculty.

"The new building gives us a top-notch animal research facility, 37 faculty labs, three large student labs, classrooms and conference rooms," he added. "This increase in space is one of the key reasons Marshall was allowed to increase the size of its entering medical class to 48 this year."

The building houses the school's six basic science departments, and provides some space for three of the school's clinical departments.

(continued on next page)

Marshall University School of Medicine's new $9.3 million Medical Education Building, located at the site of the Huntington Veterans Administration Center, will provide classroom facilities for students and research space for faculty. The building, and a new $11 million West Wing for the VA Center, were dedicated on September 10.

For A. Paul Kidd, Director of the VA Medical Center, the event had double significance.

"The completion of the West Wing particularly pleases us because it allowed us to phase out 10-bed wards," he said. "Now we have mostly semi-private rooms, with a few private rooms and a few four-bed wards. . ."

Despite the phasing out of the large wards, the new wing increased the Center's bed count from 170 to 180. Additional space went into procedural rooms and teaching space.

Kidd said the improvements make it possible to provide top-quality care for area veterans, instead of sending those needing more than routine care to other VA hospitals.

"Two factors contributed to this turnaround," he said. "We now have 45 physicians on our staff, most of them joint appointments with the School of Medicine, who have brought a variety of much-needed specialties for patient care. Additionally, the VA committed more than $20 million for capital improvements to bring the medical center up to the standards required for a medical school relationship. This has brought us into the Twentieth Century in terms of facilities and equipment."

Review A Book

The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal*, Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication.

Current Pediatric Diagnosis & Treatment, 7th Edition, by C. Henry Kempe, M. D.; Henry K. Silver, M. D., and Donough O'Brien, M. D. 1,106 pages. Price $26. Lange Medical Publications, Los Altos, California 94022. 1982.

Current Obstetric and Gynecologic Diagnosis and Treatment, 4th Edition, edited by Ralph C. Benson, M. D. 1,038 pages. Price $25. Lange Medical Publications, Los Altos, California 94022. 1982.

Principles of Clinical Electrocardiography, 11th Edition, by Mervin J. Goldman, M. D. 437 pages. Price $15. Lange Medical Publications, Los Altos, California 94022. 1982.

Council Deals With Variety Of Programs and Issues

The State Medical Association's Council, dealing with a heavy agenda, took the following actions during its pre-Convention meeting at the Greenbrier in August.

—Elected to retired membership Dr. Wilhelm S. Albrink of Morgantown, and the following to honorary membership: Drs. J. Marshall Carter, Beckley: Charles M. Polan, Huntington; J. E. Hall, Newell; J. Keith Pickens, Mount Clare; Gunter Schwartzbart, North Miami Beach, Florida (formerly of Harrison County); David M. Wayne, Bluefield; W. E. Ackermann, M. A. Gaydosh, Jr., Nime K. Joseph, David W. Palmer and Albert L. Wanner, all of Wheeling; M. M. Ralsten, also of Beckley; R. W. Cronlund, Philippi, and Donald R. Roberts, Elkins.

—Accepted a general operating fund report of receipts and expenditures through August 20 of the calendar and fiscal year, along with information showing 1,984 dues-paying members in the Medical Association as of that date.

—Approved for introduction into the House of Delegates a by-laws amendment to give a 50-per cent dues reduction to physicians in their first year of practice; and constitution and by-laws amendments to make a resident physician in his first year of approved training, and prior to licensure under state law, eligible for State Medical Association membership.

—Received from Dr. Jack Leckie of Huntington, Chairman of the Committee on Insurance, an update on participation, and other trends, relative to the Association-endorsed professional liability insurance program.

—Accepted the invitation of the Greenbrier to return for the 116th Annual Meeting of the Medical Association August 25-27, 1983.

—Directed further efforts to determine the most feasible approach the Association might pursue in obtaining from Aetna Life & Casualty an accounting of certain experience under the December, 1972-December, 1980, professional liability insurance program endorsed by the Association.

—Approved the addition of Dr. Richard G. Starr of Beckley to the planning committee for the Mid-Winter Clinical Conference.

—Endorsed the American Cancer Society's "Cancer Caring & Sharing" Program now operated in several West Virginia communities and designed to assist patients and their families in understanding and adjusting to the disease.

—Approved for introduction in the House of Delegates a resolution expressing Association concern about West Virginia Board of Medicine vacancies, and calling upon the Department of Health and the Governor to take support and other actions necessary to insure implementation of the 1980 State Medical Practice Act.

—Heard annual program updates, as they related to health and medical care, from Assistant State Welfare Commissioner David Forinash; Workmen's Compensation Commissioner Gretchen Lewis; Director Earl Wolfe of Vocational Rehabilitation; Insurance Commissioner Richard Shaw, and James Cuppy, Field Manager for Medicare Operations of Nationwide Insurance with offices in Columbus, Ohio.

—In an executive session, on which a report was provided for official Council minutes, delayed staff salary adjustments and directed the incoming Association President to appoint a committee to study the "entire staff expenditure picture and present same" for correlation with a 1983 operating budget to be prepared for consideration at a November Council meeting.

Dues, Membership Revisions Receive House Attention

The Medical Association's House of Delegates adopted, during its 1982 Annual Meeting, a by-laws amendment to provide physicians in their first year of practice a 50-per cent reduction in annual dues.

Introduced into the House, and held over as required for final consideration in 1983, was a constitutional amendment to make residents in their first year of approved training eligible for Association membership. A by-laws amendment to implement that change also will be up for final action next August.

Under current state law, those first-year residents are not eligible for licensure (they work under an educational training permit issued by the West Virginia Board of Medicine), and thus also are not now eligible for Association membership pending licensure.

The exact language of the amendment follows:

AMENDMENT TO THE BY-LAWS

(Approved by the Committee on Constitution and By-Laws, Executive Committee and the Council, August 25-26, adopted August 28, 1982, by House of Delegates.)

Amend Chapter I, Section 7, to read as follows:

Sec. 7. Dues in the amount of $250 shall be payable annually on January first, of which amount $12 shall be earmarked for the Charles Lively Memorial Scholarship Fund of the West Virginia State Medical Association; except, however, that *annual dues for physicians in their first year of practice shall be $125 and* annual dues of members in *internship*/residency programs and student members shall be $50 and $15, respectively. Dues may be waived—upon nomination by a component society and approval by Council—for active members temporarily incapacitated for a minimum period of one year because of mental or physical illness. Any member whose dues have not been paid by April first shall be held to be delinquent and shall be automatically dropped from membership. Such member cannot be reinstated except by a majority vote of the component society, or *Resident or* Medical Student Section, of which he was a member taken prior to the end of the calendar year.

If dues are paid after June thirtieth by new members, only one-half the amount of the fixed annual dues shall be collected from such members. All members who are dropped from the rolls on April first but who are reinstated during the current year shall pay the full amount of the fixed annual dues.

(Note: The effect of this amendment is to give a 50-per cent dues reduction to physicians in their first year of practice. New language is set in italics.)

AMENDMENTS TO THE CONSTITUTION

(Approved by the Committee on Constitution and By-Laws, Executive Committee and the Council, August 25-26, introduced into House of Delegates August 26, 1982, and subject to action by the House August 25, 1983.)

Sec. 1 This Association shall consist of active, retired, honorary, *resident* and student members.

Sec. 2. Members. Membership in the Association shall be limited to doctors of medicine licensed to practice in West Virginia who are members of a component medical society of the West Virginia State Medical Association; *residents who are licensed to practice medicine in West Virginia, or who are serving in internship/residency training programs approved by the West Virginia Board of Medicine prior to meeting requirements for licensure;* and students en-

rolled in accredited schools of medicine in West Virginia granting Doctor of Medicine degrees.

Sec. 6. Resident members shall be those persons who are licensed to practice medicine in West Virginia, or who are serving in internship/residency training programs approved by the West Virginia Board of Medicine prior to meeting requirements for licensure, and who are qualified for membership under the By-Laws of this Association.

ARTICLE XIV. — AMENDMENTS

Sec. 1. The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates persent at any annual session, provided that such amendment shall have been presented in open meeting at the previous annual session, and that it shall have been published twice during the year in THE WEST VIRGINIA MEDICAL JOURNAL, or sent officially to each component society, and *resident and* student members whose names are listed on the official roster of the Association at least two months before the meeting at which final action is to be taken.

(Words in italics indicate new portions to be added or a change in old verbage. The purpose of the amendments is to provide eligibility for State Association membership for interns/residents in their first year of approved training, before they can be licensed under state law.)

AMENDMENT TO THE BY-LAWS

(Approved by the Committee on Constitution and By-Laws, Executive Committee and the Council, August 25-26, also introduced in House August 26, 1982, and now awaiting action by the House August 25, 1983.)

Sec. 1. The name of a physician on the properly certified roster of members of a component society shall be prima facie evidence of membership in this Association, provided he has paid local and state dues and any current assessment, and provided further that he is licensed to practice medicine in West Virginia. The membership also shall include, upon payment of state dues and any current assessment: *a resident licensed to practice medicine in West Virginia, or who is serving in an internship/residency training program approved by the West Virginia Board of Medicine prior to meeting requirements for licensure; and* a student enrolled and working toward a Doctor of Medicine degree, in any accredited school of medicine in West Virginia; provided, further, that the academic status of each medical student applicant for membership shall be certified by the dean of his medical school.

In the left photo, Dr. Harry Shannon (right), Parkersburg, is administered the oath of office as new President of the State Medical Association by Dr. John B. Markey, Charleston, the 1981-82 President, during the second and final session of the House of Delegates at the Association's Annual Meeting in August. Doctor Shannon also attended the meeting of the Association's Publication Committee (right photo), which met during the Annual Meeting. Seated, from left, are Drs. Vernon E. Duckwall, Elkins, Associate Editor of The West Virginia Medical Journal; Stephen D. Ward, Wheeling, Editor, and David Z. Morgan, Morgantown, Associate Editor; standing, from left, Drs. Joe N. Jarrett, Oak Hill, and L. Walter Fix, Martinsburg, Associate Editors; Doctor Shannon; and Thomas J. Holbrook, Huntington, Associate Editor. Not shown is Dr. John M. Hartman, Charleston, Associate Editor.

Sec. 4. Each member in attendance at an annual session shall register and indicate the component society, or *Resident or* Medical Student Section, of which he is a member. When his right to membership has been verified by reference to the roster of his society, *Resident or* Medical Student Section, he shall receive a badge which shall be evidence of his right to all privileges of membership at that session. No member shall take part in any of the proceedings of an annual session until he has complied with the provisions of this Section.

(Note: New language is set in italics. The amendment would make an intern resident in his first year of approved training, and prior to licensure under state law, eligible for State Medical Association membership and thus provide for implementation of the preceding constitutional amendment.)

Annual Elections Conducted By Sections, Societies

Here are officers elected or re-elected by specialty societies or sections during meetings in conjunction with the West Virginia State Medical Association's Annual Meeting in August at the Greenbrier:

West Virginia Society of Anesthesiologists: Drs. Jeanne A. Rodman and David A. Graff, both of Morgantown, President and Secretary-Treasurer, respectively.

West Virginia Urological Society: Drs. John A. Belis, Morgantown, President, and Tara C. Sharma, Huntington, Secretary-Treasurer.

West Virginia Radiological Society: Drs. Johnsey L. Leef, Jr., Charleston, President: John C. Turner, Fairmont, Vice President: and William G. Hayes III, Secretary-Treasurer.

Section on Orthopedic Surgery: Drs. Darrell C. Belcher, Princeton, President: J. David Blaha, Morgantown, Vice President, and Arthur A. Abplanalp, Charleston, Secretary-Treasurer.

VA Placement Service Started

The Veterans Administration has established a Physician Placement Service in Randolph, Massachusetts, that enables VA medical centers throughout the United States to identify physicians who meet the specialty needs of the various medical centers.

For further information and application, physicians should write to: VA Physician Placement Service, Randolph, MA 02368; or call 1-800-343-8831 (toll free).

Medicine-Ministry Alcoholism Conference Planned

A pastoral counselor and a physician, both of Richmond, Virginia, will conduct a one-day conference on alcoholism in Charleston on November 15.

Entitled "A New Look at Alcoholism: Second Annual Conference, Medicine and Ministry in Cooperative Patient Care," the program will be held at the West Virginia University Medical Center Education Building.

Emphasis will be on the victims of alcoholism – the patients and those who live with them as well as the professionals who offer them spiritual and medical support. The course was designed for physicians and other health professionals who deal with the alcoholic patient, clergy who counsel victims of alcohol abuse, and the interested public.

The guest faculty will be William B. Oglesby, Jr., D.D., Ph.D., Marthina DeFriece Professor of Pastoral Counseling, Union Theological Seminary, who has been called one of the nation's leaders in pastoral work. A former President of the Association for Clinical Pastoral Education, Doctor Oglesby currently is Vice President of the Middle Atlantic Institute for Alcohol Studies, and Diplomate of the American Association of Pastoral Counselors.

On MCV Faculty

Doctor Forbes is Associate Director of Substance Abuse and Assistant Professor of Psychiatry at the Medical College of Virginia. He received his undergraduate training at Harvard University, and is a graduate of Columbia University College of Physicians and Surgeons. A member of the American Medical Educators and Researchers in Substance Abuse, he has conducted numerous training programs on substance abuse.

Some of the specific objectives of the workshop are: to develop a more cooperative effort in the detection and treatment of alcoholism: provide a personal and professional awareness of alcoholism and its victims: and to present an update of current treatment modalities and new therapeutic opportunities.

The meeting will begin with registration at 7:30 A. M. and adjourn at 3:15 P. M.

Sponsors are the Charleston Area Medical Center, Pastoral Care Department; and WVU Medical Center, Charleston Division.

Conference coordinators are the Rev. Dr. Fred G. Bannerot III and St. Frances Kirtley, O.S.F.

Four Marshall Medical Students Honored

Four state students were honored in September during opening exercises for the Marshall University School of Medicine.

Kevin Yingling of Huntington was named Outstanding First-Year Student for the academic year 1981-82. He graduated from the West Virginia University Pharmacy School in May, 1981. He is the son of F. Gordon and D. Joanne Yingling of Huntington, and attended Barboursville High School.

Harold Edward Ayers of Huntington received the Outstanding Second-Year Student award. He graduated from MU in 1980 with majors in zoology and botany, and is the son of Harold E. and Kathleen F. Ayers of Huntington.

Gerald G. Blackwell of Gauley Bridge is the school's outstanding third-year student. He graduated from the University of Wisconsin-Green Bay with a pre-med degree, and is the son of Dr. Lyle M. and Mary Blackwell of Gauley Bridge.

Kathleen Lucas of Morgantown was named Outstanding Pathology Student. She earned a medical technology degree in 1977 from West Virginia University, then worked as Chief Technologist at the University Hospital for three years.

New Public Health Service Agency Announced

Dr. Edward N. Brandt, Jr., Assistant Secretary for Health, U. S. Department of Health and Human Services, Washington, D. C., recently announced formation of the Health Resources and Services Administration, a new agency of the Public Health Service, effective September 1.

"The new agency will provide leadership and direction for programs to provide direct health services for certain population groups and to develop the resources necessary for the health care system of the future," Doctor Brandt said.

(Doctor Brandt was the keynote speaker for the opening exercises of the State Medical Association's Annual Meeting in August at the Greenbrier in White Sulphur Springs.)

The Health Resources and Services Administration consolidates the following PHS programs into four bureaus: Indian Health Service; Bureau of Health Maintenance Organizations and Resource Development; Bureau of Health Professions; and Bureau of Health Care Delivery and Assistance.

Medical Meetings

Oct. 2-3—Update '82 (Wheeling Clinic CME Program), St. Clairsville, OH.

Oct. 4-7—AAFP, San Francisco.

Oct. 8-10—WV Assoc. of Alcoholism & Drug Abuse Counselors, Inc., Parkersburg.

Oct. 15-17—Med. Society of the District of Columbia, White Sulphur Springs.

Oct. 16—Hemophilia Conference, Morgantown.

Oct. 22-24—PA Med. Society, Philadelphia.

Oct. 23-28—Am. Academy of Pediatrics, New York City.

Oct. 24-29—Am. College of Surgeons, Chicago.

Oct. 24-30—Am. College of Gastroenterology, New York City.

Oct. 27—State Workshop on Primary Care/Mental Health (WV Dept. of Health; WVU Medical Center, Charleston Division, and MU School of Medicine), Charleston.

Oct. 30—Informed Consent in Law and Medicine (WVU College of Law), Morgantown.

Oct. 30-Nov. 2—Southern Med. Assn., Atlanta.

Nov. 3—Spinal Cord Injury Seminar (Keystone Regional Spinal Cord Injury System), Pittsburgh.

Nov. 4-6—Am. Cancer Society, New York City.

Nov. 10-14—Med. Society of VA, Williamsburg.

Nov. 11-14—Med. Society of Va., Williamsburg.

Nov. 15-18—Am. Heart Assoc., Dallas.

Nov. 17-20—Am. Assoc. for Cancer Education Birmingham, Ala.

Nov. 18—Diabetes Update (Wheeling Hospital, Ohio Valley Medical Center), Wheeling.

Nov. 19-23—Gerontological Society of Am., Boston.

Dec. 2—Am. College of Chemosurgery, New Orleans.

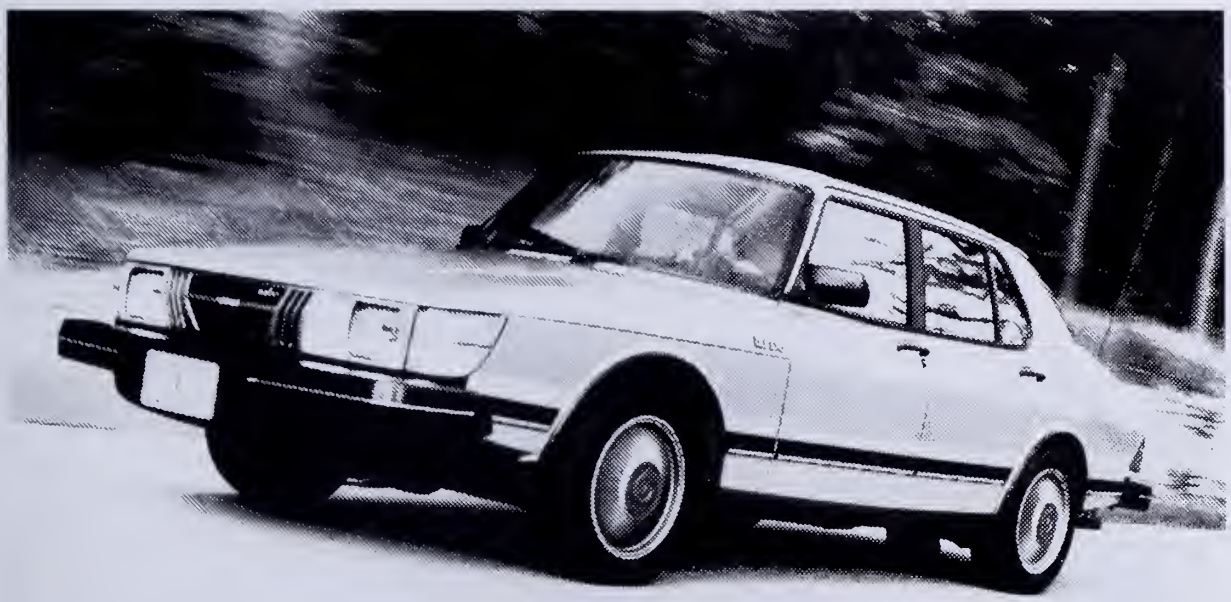
Dec. 5-8 — Interim Meeting, AMA House, Miami Beach.

1983

Jan. 21-23—16th Mid-Winter Clinical Conference, Charleston.

April 15-17—WV Chapter, AAFP, Morgantown.

Aug. 25-27—116th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.



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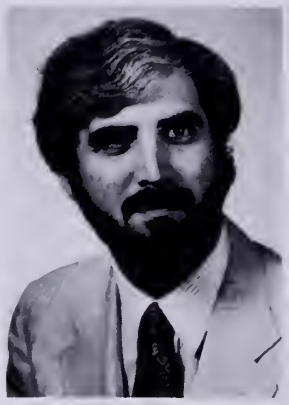
WVU Medical Center
–News–

Compiled from material furnished by the Medical Center News Service, Morgantown, W. Va.

Eye Plastic Surgeon To Give National Telecast Lecture

A WVU ophthalmic plastic surgeon has been asked to present an educational program on his research for telecast via satellite to ophthalmologists throughout he country.

Gary T. Raflo, M. D., Assistant Professor of Ophthalmology in the WVU School of Medicine and Chief of the Oculoplastic Services at University Hospital, said the program will be telecast sometime during the fall by Eye-Sat, short for Satellite Relayed Professional Education for Ophthalmologists.



Gary T. Raflo, M. D.

Doctor Raflo's area of research is the human lacrimal system. He currently is involved in developing new methods of evaluating the tear ducts using thermography rather than x-ray.

He is the only board certified oculoplastic surgeon in West Virginia, and is one of only 175 Fellows of the American Society of Ophthalmic Plastic and Reconstructive Surgery.

His addition to the staff last year was among a number of innovations in the Department of Ophthalmology which have greatly enhanced the Medical Center's position as the state's comprehensive referral center for eye problems.

Doctor Raflo will be director of an eye trauma referral center for severe eye and facial injuries which the department of ophthalmology expects to establish with the cooperation of the Departments of Neurosurgery, Otolaryngology, Oral Surgery, Orthopedics and the Plastic Surgery Service at University Hospital. The new center is expected to be operational within a few months.

He is a graduate of the University of Virginia, where he also received his medical degree and completed his residency.

Doctor Whittier Named Chief Of Nephrology Section

Frederick C. Whittier, Jr., M. D., has joined the faculty as Professor of Medicine and Chief of the Section of Nephrology.

A graduate of the University of Pittsburgh and the Stritch School of Medicine, Loyola University at Chicago, he took his postgraduate training at the University of Iowa Hospital and Vanderbilt University Hospital.

For the past four years, Doctor Whittier has been Associate Professor of Medicine and Pathology at the University of Missouri School of Medicine, and Director of the General Clinical Research Center. He also is a former faculty member at the University of Kansas.

He has served as President of the Medical Advisory Board of the National Kidney Foundation. A Fellow of the American College of Physicians, he is a member of the American and international societies of nephrology, the American Society of Artificial Internal Organs, the American Association of Tissue Banks, and a number of other professional organization.

Cornell Physician Accepts Post Vacated By Doctor Warden

John C. Alexander, M. D., has accepted the post as Chief of the Section of Cardiothoracic Surgery in the WVU School of Medicine.

He is replacing Herbert E. Warden, M. D., who will devote more time to the new developments of pediatric cardiac surgery. Doctor Warden is internationally recognized for his contributions to cardiothoracic surgery, particularly in the field of congenital abnormalities.

Doctor Alexander comes to WVU from the Cornell University Medical Center, where the was Assistant Attending Surgeon at both the New York Hospital and the Memorial Sloan-Kettering Cancer Center.

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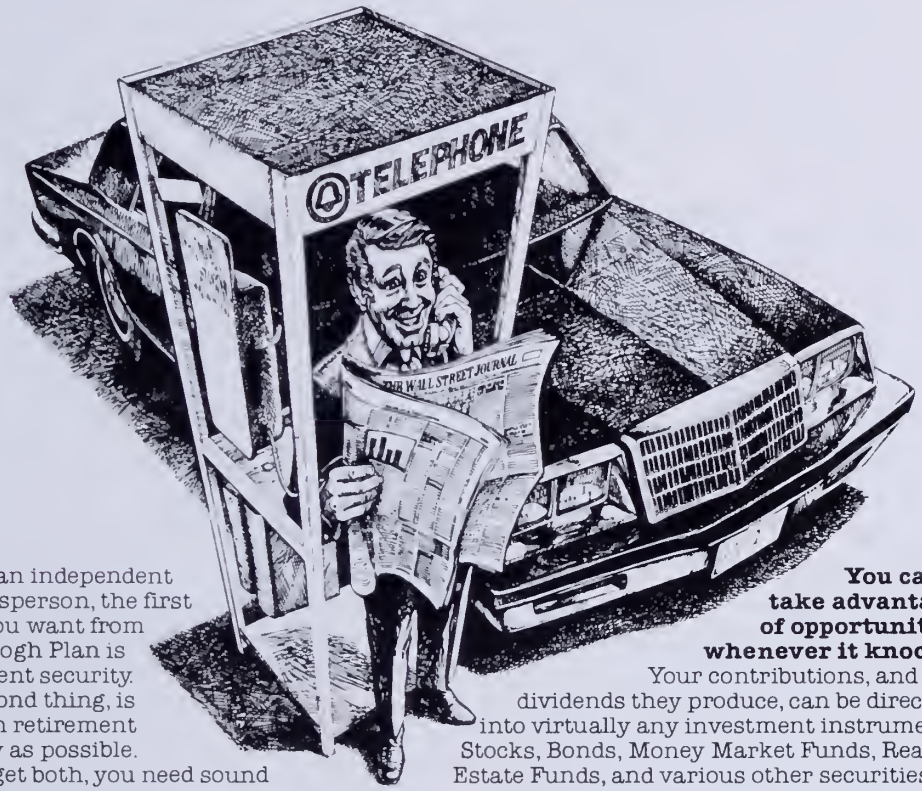

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Your contribution can be invested at your discretion, at ours, or both.

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You can take advantage of opportunity, whenever it knocks.

Your contributions, and the dividends they produce, can be directed into virtually any investment instrument. Stocks, Bonds, Money Market Funds, Real Estate Funds, and various other securities.

And as your objectives change your Keogh Plan can react to reflect that change.

Our primary concern is your financial growth and security.

Sound management and flexibility are just the beginning of our Keogh Plan. We do the paperwork. We prepare all initial filings with the Department of Labor and Internal Revenue Service. Your Plan is set up with minimum effort on your part. And you can be certain it's complete and accurate with respect to legal and government regulations.

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Third-Party News, Views and Program Concerns

New Catastrophic Health Plan Dropped In Hopper

Dropped in the Congressional hopper in Washington as an early entry in the upcoming contest next year over national health plans was an old standby—catastrophic—with a new twist.

The bill was introduced by House Budget Committee Chairman James Jones (D-OK) and Rep. James Martin (R-NC), a member of the House Ways and Means Committee.

Under the legislation, employers would be encouraged to offer catastrophic coverage plans providing that employees would not have to incur out-of-pocket expenses of more than $3,500 yearly. For people not reached by such private insurance, the government would set up a Catastrophic Automatic Protection Plan (CAPP) paying all medical expenses after a specified amount of personal spending, based on family income, is incurred. CAPP would be administered by the Health and Human Services (HHS) Department. Benefits below the catastrophic level would be the same as those under Medicare.

The two lawmakers said the catastrophic benefit could be financed through imposing limitations on the tax deductions for the costs of providing employees health insurance. This limit would be $100 per month per family. If it is exceeded, employees would be taxed on the surplus as if it were income. The present tax deductions for medical expenses above a certain percentage of income would be eliminated, but people could still deduct part of the cost of their premium payments.

The bill also promotes prospective payments for Medicare by allowing states and legal entities to seek a waiver from the government.

The Catastrophic Health Expense and Cost Constraint (CHECC) plan's tax features are similar to those that have been advanced in some of the pro-competition plans introduced in this Congress.

Medicaid Provider Contracts Okayed In California

The California legislature recently enacted legislation that authorizes the Medicaid program to negotiate selective and exclusive contracts with providers. The new law became effective July 1 for institutional providers and, in July, 1983, will be extended to professionals. Certain federal waivers will have to be granted before implementation.

The California law, vigorously opposed by the California Medical Association, also authorizes commercial insurers and not-for-profit hospital and medical service plans to negotiate contracts with providers for "alternative" rates of payment starting January, 1983, for institutions and in July, 1983, for professionals. The state's current statutory freedom of choice of provider guarantees are modified to the degree that under a policy or plan incorporating negotiated provider contracts the beneficiary may have covered benefits eliminated or limited in amount unless the services are provided by contracting providers.

The AMA Department of State Legislation is examining state health insurance laws to determine to what extent the preferred provider concept may be permitted in the various states, and will be able to provide information to associations that will be reviewing legislative proposals that include such concepts.

Ambulatory Surgical Services

Regulations for ambulatory surgical facilities, including provision for 100-per cent Medicare reimbursement to physicians for many procedures, have been announced by the Health Care Financing Administration.

The August 5, 1982, Federal Register announcement lists 96 specific surgical procedures which initially will be covered.

A copy of the complete regulations may be obtained by contacting the Association's Staff Counsel.

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J-9043-4 July 1981

In the treatment of insomnia

Good mornings start with restful nights.

Dalmane *(flurazepam HCl/Roche)* patients fall asleep faster, sleep longer and seldom awaken with morning hangover.

Feeling well rested in the morning usually means having slept well the night before. And for insomniac patients receiving hypnotic therapy, a good morning also means awakening with few side effects from their medication. Many physicians choose Dalmane for their patients who suffer from insomnia for this very reason.

Aside from enabling patients to fall asleep more quickly and sleep longer, Dalmane seldom causes morning hangover. Most Dalmane patients feel alert and refreshed when they awaken. In 53 paired-night clinical studies comparing Dalmane and placebo in 2010 insomniac patients with a variety of secondary diagnoses, most Dalmane patients awakened more alert and refreshed, and less groggy and drowsy, than on nights when they had taken only placebo.[1] In a double-blind crossover study of 42 patients in private practice, approximately three times as many patients reported feeling refreshed and alert upon awakening after a night on Dalmane (flurazepam/Roche) compared to placebo nights.[2] This difference was highly significant ($p<0.001$). And a retrospective study of 2542 hospitalized patients who received Dalmane revealed only a 3.1% incidence of side effects.[3]

While residual effects from Dalmane therapy are infrequent, patients should be cautioned about drinking alcohol, driving or operating hazardous machinery after ingesting the drug.

Efficacy and safety in a broad range of patient types.

Over 2000 clinical trials involving more than 10,000 patients have shown that Dalmane patients fall asleep sooner, sleep longer and experience fewer nocturnal awakenings.[4] The safety and efficacy of Dalmane have been demonstrated in medical and surgical hospitalized patients, in patients seen in office practice and in elderly patients.[5-8] Since the risk of oversedation, dizziness, confu-

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sion and/or ataxia increases with larger doses in the elderly, it is recommended that the dosage be limited to 15 mg.

Moreover, the efficacy and safety of Dalmane for the treatment of insomnia have been demonstrated in thousands of patients with a variety of primary medical conditions, including cardiovascular, neuropsychiatric, endocrine-metabolic, gastrointestinal, genitourinary, respiratory and musculoskeletal disorders.[1] Dalmane (flurazepam HCl/Roche) is contraindicated in pregnancy and in patients hypersensitive to the drug.

Avoids rebound insomnia upon discontinuation.

Rebound insomnia—a worsening of sleep beyond pretherapy levels after drug discontinuation—has been reported as a potential clinical problem with some hypnotics.[9,10] However, this problem has not been reported with Dalmane. In eight out of eight sleep laboratory studies, there were no reports of rebound insomnia.[11] When you prescribe Dalmane, you can be confident of efficacy that enhances therapeutic progress. Your insomniac patients can be assured of a restful night, night after night—a good start for a good morning.

References: **1.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **2.** Zimmerman AM: *Curr Ther Res 13*:18-22, Jan 1971. **3.** Greenblatt DJ, Allen MD, Shader RI: *Clin Pharmacol Ther 21*:355-361, Mar 1977. **4.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **5.** Meyer JA, Kurland KZ: *Milit Med 138*:471-474, Aug 1973. **6.** Feffer HL, Gibbons B: *Med Times 101*(8):130-135, Aug 1973. **7.** Jacobson A *et al*: *Psychophysiology 7*:345, Sep 1970. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 1978. **10.** Kales A *et al*: *JAMA 241*:1692-1695, Apr 1979. **11.** Monti JM: *Methods Find Exp Clin Pharmacol 3*(5):303-326, 1981.

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Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended. Repeated therapy should only be undertaken with appropriate patient evaluation.

Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patient to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults*: 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients*: 15 mg recommended initially until response is determined. [illegible] Capsules containing 15 mg or 30 mg flurazepam HCl.

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Obituaries

ALBERT W. HOLMES, M. D.

Dr. Albert W. Holmes, Hinton internist from 1945 until his retirement in 1977, died on August 7 in a Hinton hospital. He was 80.

Born in Lowell (Summers County), Doctor Holmes was graduated from West Virginia University and received his M. D. degree in 1938 from the Medical College of Virginia.

He completed his internship and residency at Hinton Hospital.

A U. S. Army Medical Corps veteran of World War II, Doctor Holmes was an honorary member of the Summers County Medical Society, West Virginia State Medical Association and American Medical Association.

Surviving are the widow and a half-brother, John Bryant of Hillsdale (Monroe County).

* * *

RONALD J. McNAMARA, M. D.

Dr. Ronald J. McNamara of Parkersburg, formerly of Charleston, died in Parkersburg on August 8. He was 78.

An internist, Doctor McNamara was associated with Staats Hospital while in Charleston.

Born in Carnegie, Pennsylvania, he was graduated from Notre Dame University and received his M. D. degree in 1930 from St. Louis University Medical School. He interned at Good Samaritan Hospital in Cincinnati and completed residencies in pathology and medicine at Cincinnati General Hospital and Henry Ford Hospital in Detroit.

Doctor McNamara also held an M. S. degree in pathology from the University of Cincinnati.

A U. S. Navy veteran of World War II, he was an honorary member of the Kanawha Medical Society, West Virginia State Medical Association and American Medical Association.

Surviving is a sister, Mrs. Margaret Partridge of Parkersburg.

* * *

HAROLD H. HOWELL, M. D.

Dr. Harold H. Howell of Madison, a retired general practitioner, died on August 21 in a hospital there. He was 85.

Doctor Howell had practiced in Madison since 1923, retiring this year.

A native of Philippi, he was graduated from West Virginia University, and received his M. D. degree in 1921 from the University of Cincinnati. He interned at Good Samaritan Hospital in Lexington, Kentucky, and took his residency at Coal River Hospital in Danville.

A former Mayor of Danville, he was Secretary of the Boone County Medical Society in 1946.

Doctor Howell was an honorary member of the Boone County Medical Society, West Virginia State Medical Association and American Medical Association.

Survivors include the widow; a son, Harold H. Howell, Jr., of Madison; two daughters, Mrs. Jean Dolan of Madison and Mrs. Nancy Young of Gainesville, Florida, and two sisters, Mrs. Eva Chambers of Cleveland and Mrs. Jessie Callahan of Madison.

* * *

RALPH FRAZIER, M. D.

Dr. Ralph Frazier of Beckley, a general practitioner, died on August 15 in a hospital there. He was 80.

Doctor Frazier had practiced in Tennessee, New York, and Oklahoma, and in Welch, Fayetteville, Grantsville, Logan and Beckley in West Virginia.

He retired from Pinecrest Hospital in Beckley last June, and continued to practice in a Beckley area clinic and nursing home until his death.

A native of Knoxville, Tennessee, he received his undergraduate degree and M. D. degree (1927) from the University of Tennessee. He interned at Knoxville General Hospital and at Woman's General Hospital in Detroit.

Doctor Frazier was an honorary member of the Fayette County Medical Society, West Virginia State Medical Association and American Medical Association.

Survivors include the widow; a daughter, Mrs. Isabella Reed of Houston, Texas, and a brother, Alfred Frazier of Knoxville.

* * *

JOHN O. RANKIN, M. D.

Dr. John O. Rankin, charter member of the Wheeling Clinic, died on August 6 in a Wheeling Hospital. He was 84, the last-surviving original member of the Wheeling Clinic.

Doctor Rankin, an orthopedic surgeon, was President of the Clinic in the 60s. The Clinic was organized in July, 1924.

He was Vice President and a member of the Council at the founding meeting of the West Virginia Chapter, American College of Surgeons, and was appointed the College's Governor for the state from 1955 to 1961. He also was a Past President of the Ohio County Medical Society and the West Virginia Chapter, ACS.

A native of Cambridge, Ohio, he was graduated from Muskingum College there, and received his M. D. degree in 1922 from Jefferson Medical College.

He interned at Ohio Valley General Hospital, and then completed postgraduate training at University Hospital at Jefferson in Philadelphia; at the former Hospital for Ruptured and Crippled and Reconstruction in New York City; the Bochler Clinic in Vienna, Austria, and at the University of Michigan.

From 1942 to 1946, Doctor Rankin served in Medical posts with the U. S. Naval Reserve at Memphis, Tennessee, and Norfolk, Virginia.

A Fellow of the American College of Surgeons, he also was an honorary member of the Ohio County Medical Society, West Virginia State Medical Association and American Medical Association.

Surviving are the widow and a daughter, Mrs. Paul Euwer of Pittsburgh.

* * *

GEORGE S. APPLEBY, M. D.

Dr. George S. Appleby of Martinsburg, a general practitioner and surgeon, died on August 5 in a Baltimore Hospital. He was 64.

A native of Martinsburg, Doctor Appleby was graduated from West Virginia University and received his M. D. degree in 1943 from Jefferson Medical College. His postgraduate training included an internship at Jefferson Medical College Hospital and a residency at Johns Hopkins Hospital.

He was a member of the West Virginia State Medical Association; Southern Medical Association, and American Society of Abdominal Surgeons.

Doctor Appleby was a Past President of the medical staff at City Hospital in Martinsburg, and served with the U. S. Army during the Korean War.

Surviving is a sister, Mrs. Fred B. Hess of Martinsburg.

Necrology Report

The following is a list of West Virginia physicians whose deaths have been reported to the West Virginia State Medical Association during the past year:

1981

Aug.	3—Bill B. Richmond	Beckley
Sept.	21—Juanedd Berry	Bluefield
Oct.	29—Donald W. Peterson	Bradley
Nov.	6—Harry A. Carney	Charleston
Nov.	24—Daniel W. Dickinson	Wheeling
Dec.	11—R. Edward Hamrick	Charleston
Dec.	13—Thomas W. Nale	Kennett Square, Pennsylvania
Dec.	17—C. A. (Carl) Hoffman	Huntington

1982

Jan.	19—Johnsey L. Leef	Richwood
Jan.	20—John P. Brick	Charleston
Jan.	24—John H. Trotter	Morgantown
Feb.	2—John Majernik	Weston
Feb.	7—Richard E. Flood	Weirton
Feb.	8—Ernesto M. Navato	Oak Hill
Feb.	12—Charles F. McCord	Welch
Mar.	18—Robert G. Arrington	Huntington
Mar.	21—Irwin S. Eskwith	Ripley
Mar.	23—David W. Mullins	Logan
Apr.	14—Ernest G. Guy	Philippi
May	5—David V. Cole	Point Pleasant
May	7—Prudencio B. Camara	Hinton
May	9—Richard E. Davenport	Princeton
May	25—William F. Hillier	Bluefield
June	4—Jerome C. Arnett	Rowlesburg
July	1—Harold B. Sunday	Fort Mill, South Carolina
July	3—Harry D. Chambers	Huntington
July	13—Chauncey B. Wright	Huntington
July	18—William P. Bittinger	Oak Hill
July	20—Kent M. Hornbrook	New Martinsville
Aug.	6—J. O. Rankin	Wheeling
Aug.	7—Albert W. Holmes	Hinton
Aug.	8—Ronald J. McNamara	Charleston
Aug.	15—Ralph Frazier	Beckley
Aug.	21—Harold H. Howell	Madison

Respectfully submitted,

CHARLES R. LEWIS
Executive Secretary

Charleston, WV
August 25, 1982.

Resolutions

Here are resolutions adopted by the House of Delegates during the West Virginia State Medical Association's 115th Annual Meeting August 26-28 in White Sulphur Springs:

A substitute for Resolution No. 1 dealing with professional liability and originally offered by the Ohio County Medical Society:

"WHEREAS, The incidence and severity of professional liability litigation continues to rage; and

"WHEREAS, The necessity of defending in a courtroom against unjustified allegations of malpractice is burdensome, time consuming, frustrating, expensive and damaging to one's professional reputation; and

"WHEREAS, The cost of defending against unjustified and frivolous allegations is reflected in increased professional liability insurance premiums which in turn are paid for by all patients via increased fees and medical care costs; and

"WHEREAS, The jurisprudence system in West Virginia lacks an adequate way to distinguish worthy from unworthy medical liability cases presented to it; and

"WHEREAS, Other states have enacted laws designed to distinguish between worthy and unworthy allegations of malpractice, and these enactments have been brought to the attention of the West Virginia Legislature, but thus far have been ignored;

"THEREFORE, BE IT RESOLVED, That the West Virginia State Medical Association use its resources to bring about the introduction of such legislation, and to promote its passage in every legitimate way."

Resolution No. II, Federal Spending, by the Kanawha Medical Society:

"WHEREAS, In the past 10 years federal spending has tripled; and

"WHEREAS, In the last five years federal taxes have doubled, largely because of the growth of social programs which in 1950 cost taxpayers $12 billion but in 1980 cost nearly $300 billion, an increase of an incredible 2,300 per cent; and

"WHEREAS, In that same period, prices rose by 278 per cent, and real social spending was, therefore, actually five and one-half times higher than in 1950; and

"WHEREAS, 16 years ago, the food stamp program cost $65 million, and in 1981 cost $11.3 billion, an increase of 17,400 per cent; and

"WHEREAS, 70 per cent of the entire federal budget is made up of items over which the Congress and Administration have no control, thus rendering control of federal spending virtually impossible by our appropriately elected officials;

"THEREFORE, BE IT RESOLVED, That the West Virginia State Medical Association advise our congressmen and senators by way of letter to support fiscally responsible budget recommendations."

A substitute for Resolution No. III dealing with the West Virginia Board of Medicine and originally proposed by the Council:

"WHEREAS, The West Virginia State Medical Association is committed to the highest possible quality of medical care for the citizens of West Virginia; and

"WHEREAS, The West Virginia State Medical Association is committed to the highest standards of ethics for its members, all other physicians and health care providers; and

"WHEREAS, The West Virginia State Medical Association was instrumental in introducing and supporting the passage of the West Virginia Medical Practice Act of 1980; and

"WHEREAS, The West Virginia Medical Practice Act gives the West Virginia Board of Medicine the means to insure the highest quality of care and ethics within the profession; and

"WHEREAS, The West Virginia Department of Health is responsible for administrative support for the West Virginia Board of Medicine in implementing the West Virginia Medical Practice Act; and

"WHEREAS, The Governor of West Virginia is responsible for insuring that the West Virginia Board of Medicine be properly constituted by appointing Board members in timely fashion and thus avoiding vacancies such as currently exist;

"THEREFORE, BE IT RESOLVED, That the West Virginia State Medical Association express its deep concern; and

"BE IT FURTHER RESOLVED, That the Governor of West Virginia be called upon to give high priority to implementation of the West Virginia Medical Practice Act."

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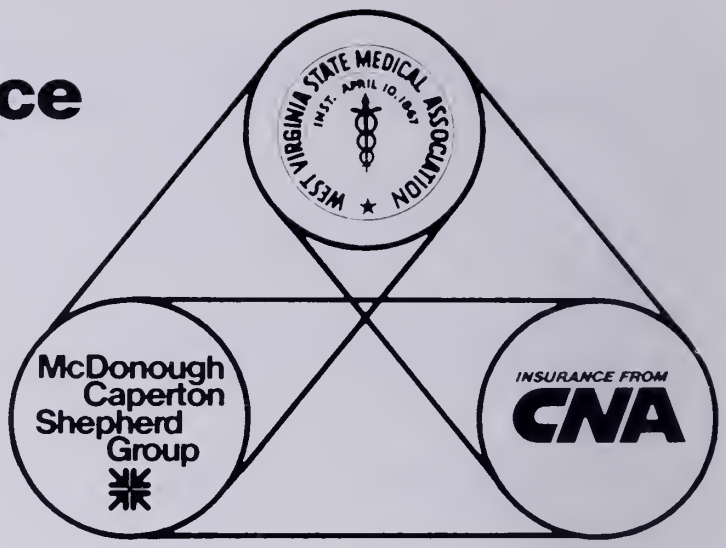

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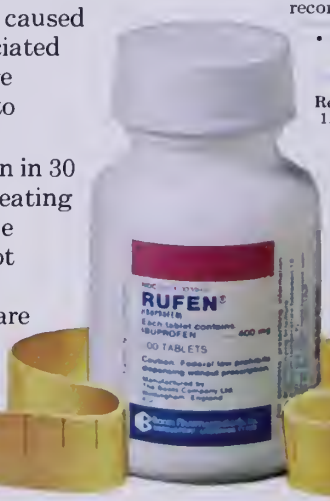

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WARNINGS: Anaphylactoid reactions have occurred in patients hypersensitive to aspirin (see CONTRAINDICATIONS). Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Peptic ulceration, perforation, or gastrointestinal bleeding can end fatally, however, an association has not been established. Rufen should be given under close supervision to patients with a history of upper gastrointestinal tract disease, and only after consulting the ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be attempted. If Rufen must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding

PRECAUTIONS: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If developed, discontinue Rufen and administer an ophthalmologic examination.

Fluid retention and edema have been associated with Rufen, caution should be used in patients with a history of cardiac decompensation.

Rufen can inhibit platelet aggregation and prolong bleeding time. Use with caution in patients with intrinsic coagulation defects and those taking anticoagulants

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain or edema

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy, this therapy should be tapered slowly when adding Rufen.

DRUG INTERACTION: *Coumarin-type anticoagulants*: The physician should be cautious when administering Rufen to patients on anticoagulants

Aspirin: Concomitant use may decrease Rufen blood levels

PREGNANCY AND NURSING MOTHERS: Rufen should not be taken during pregnancy nor by nursing mothers.

ADVERSE REACTIONS: **Incidence greater than 1%. Gastrointestinal**: The most frequent adverse reaction is gastrointestinal (4 to 16%). Includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of GI tract (bloating and flatulence). Central Nervous System: dizziness*, headache, nervousness. Dermatologic: rash* (including maculopapular type), pruritus. Special Senses: tinnitus. Metabolic: decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS). *Incidence 3% to 9%

Incidence less than 1 in 100. Gastrointestinal: gastric or duodenal ulcer with bleeding and/or perforation, hemorrhage, melena. Central Nervous System: depression, insomnia, confusion, emotional lability, somnolence, aseptic meningitis with fever and coma. Dermatologic: vesiculobullous eruptions, urticaria, erythema multiforme, Stevens-Johnson syndrome and alopecia. *Special Senses*: hearing loss, amblyopia (blurred and/or diminished vision, scotomata and/or changes in color vision) [see PRECAUTIONS]. Hematologic: neutropenia, agranulocytosis, aplastic anemia, hemolytic anemia (sometimes Coombs' positive), thrombocytopenia with or without purpura, eosinophilia, decreases in hemoglobin and hematocrit. Cardiovascular: congestive heart failure in patients with marginal cardiac function, elevated blood pressure. Allergic: syndrome of abdominal pain, fever, chills, nausea and vomiting, anaphylaxis, bronchospasms (see CONTRAINDICATIONS). Renal: acute renal failure in patients with preexisting significantly impaired renal function, [illegible] clearance, polyuria, azotemia, cystitis, hematuria. Miscellaneous: dry eyes and mouth, gingival ulcers, rhinitis

[illegible] relationship unknown. Gastrointestinal: pancreatitis. Central Nervous System: paresthesias, hallucinations, dream abnormalities, pseudotumor cerebri. Dermatologic: toxic epidermal necrolysis, photo[illegible] skin reactions. Special Senses: conjunctivitis, diplopia, optic neuritis. Hematologic: bleeding episodes. Allergic: serum sickness, lupus erythematosus syndrome, Henoch-Schonlein vasculitis. Endocrine: gynecomastia, hypoglycemia. Cardiovascular: arrhythmias (sinus tachycardia, bradycardia, and palpitations). Renal: renal papillary necrosis

OVERDOSAGE: Acute overdosage: the stomach should be emptied. Rufen is acidic and excreted in the urine, alkaline diuresis may benefit

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Dysmenorrhea: 400 mg every 4 hours as necessary

Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for the relief of pain. *Do not exceed 2,400 mg per day*

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Also for the treatment of documented *Pneumocystis carinii* pneumonitis.
Contraindications: Hypersensitivity to trimethoprim or sulfonamides, patients with documented megaloblastic anemia due to folate deficiency, pregnancy at term; nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age.
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1. Rubin RH, Swartz MN: *N Engl J Med 303* 426-432, Aug 21, 1980 2. Data on file, Medical Department, Hoffmann-La Roche Inc.

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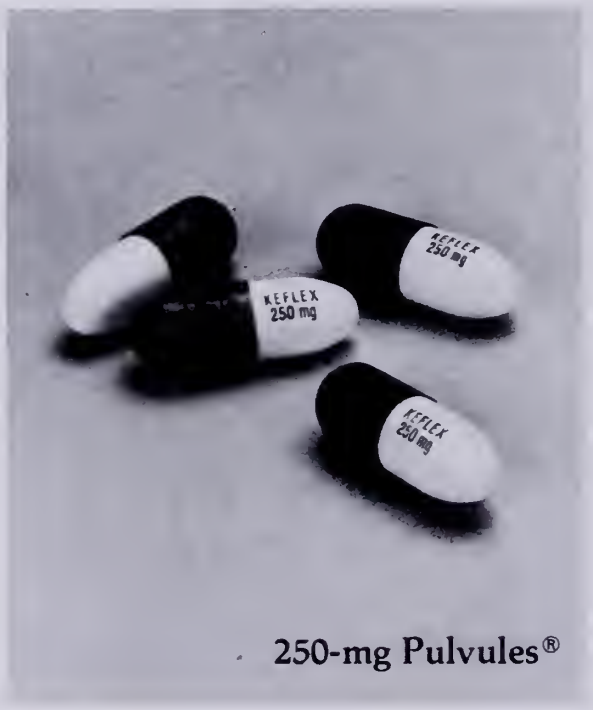

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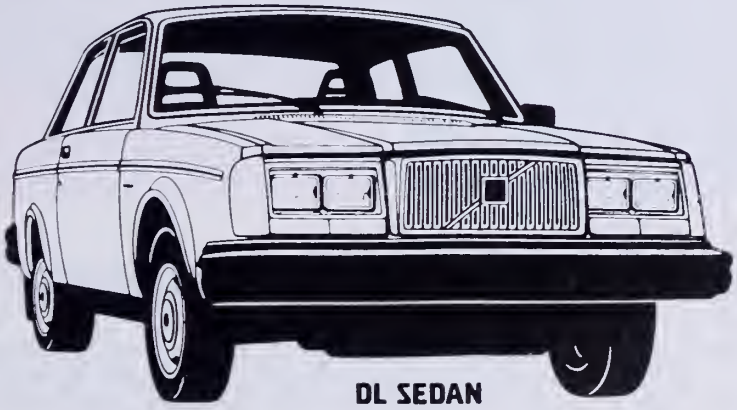

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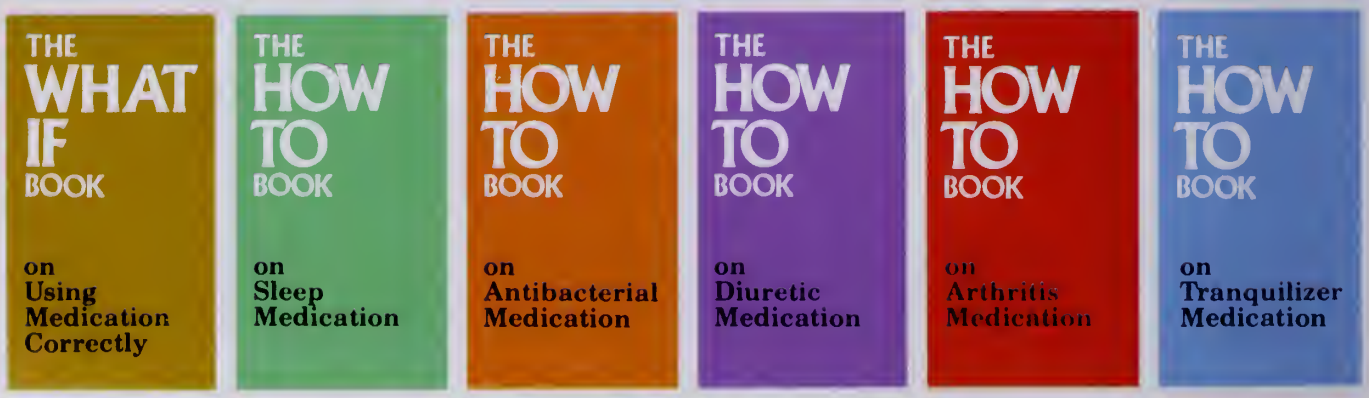

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See next page for brief summary of prescribing information.

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- Measured against a propoxyphene-acetaminophen combination for pain relief after 3rd molar extractions, ibuprofen proved equally effective and caused fewer side effects. Ibuprofen was associated with faster recovery, evidenced by more rapid reduction of trismus and return to normal function.[3]
- Measured against post-episiotomy pain in 30 patients, "ibuprofen was effective in treating the swelling as well as pain...during the first and worst days. Therefore, it is not only the analgesic but also the anti-inflammatory effect of ibuprofen that are the beneficial factors..."[4]

Measure RUFEN® (ibuprofen) against any mild to moderate pain

RUFEN	Acetaminophen + codeine combinations
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• powerful treatment of both pain and inflammation	• virtually no treatment of the inflammatory component
• better tolerated than aspirin	• combined side effects of two drugs—warning required about driving or operating machinery; possible respiratory depression with alcohol, tranquilizers, other common medications
• no narcotic risk, red tape, records	• narcotic precautions required
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References:

1. Hart FD, Huskisson EC, Ansell BM in Hart FD (editor): Drug Treatment of the Rheumatic Diseases, 2nd Ed, Adis Press, Balgowlah, Australia, 1982, p. 30.
2. Rondeau PL, Yeung E, Nelson P: Canad Dent Assoc J 46:433-439, 1980.
3. Selwyn P and Giles AD: Br Jrl of Clin Practice, Supplement 6, Safe and effective analgesia following dental surgery: A comparison of brufen and distalgesic. Pg 87-90, 1980.
4. Taina E: Curr Med Res Opinion, 7:423-428, 1981.

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And Rufen® Measures Up Best

RUFEN® (ibuprofen) Tablets

INDICATIONS AND USAGE: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in the long-term management of these diseases. Safety and effectiveness have not been established for Functional Class IV rheumatoid arthritis

Relief of mild to moderate pain. Treatment of primary dysmenorrhea.

CONTRAINDICATIONS: Patients hypersensitive to ibuprofen, or with the syndrome of nasal polyps, angio-edema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory drugs (see WARNINGS).

WARNINGS: Anaphylactoid reactions have occurred in patients hypersensitive to aspirin (see CONTRAINDICATIONS). Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Peptic ulceration, perforation, or gastrointestinal bleeding can end fatally, however, an association has not been established. Rufen should be given under close supervision to patients with a history of upper gastrointestinal tract disease, and only after consulting the ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be attempted. If Rufen must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

PRECAUTIONS: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If developed, discontinue Rufen and administer an ophthalmologic examination.

Fluid retention and edema have been associated with Rufen; caution should be used in patients with a history of cardiac decompensation.

Rufen can inhibit platelet aggregation and prolong bleeding time. Use with caution in patients with intrinsic coagulation defects and those taking anticoagulants.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy, this therapy should be tapered slowly when adding Rufen

DRUG INTERACTION: *Coumarin-type anticoagulants.* The physician should be cautious when administering Rufen to patients on anticoagulants.

Aspirin. Concomitant use may decrease Rufen blood levels.

PREGNANCY AND NURSING MOTHERS: Rufen should not be taken during pregnancy nor by nursing mothers.

ADVERSE REACTIONS: Incidence greater than 1%. Gastrointestinal: The most frequent adverse reaction is gastrointestinal (4 to 16%). Includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of GI tract (bloating and flatulence). Central Nervous System: dizziness*, headache, nervousness. Dermatologic: rash* (including maculopapular type), pruritus. Special Senses: tinnitus. Metabolic: decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS). *Incidence 3% to 9%.

Incidence less than 1 in 100. Gastrointestinal: gastric or duodenal ulcer with bleeding and/or perforation, hemorrhage, melena. Central Nervous System: depression, insomnia, confusion, emotional lability, somnolence, aseptic meningitis with fever and coma. Dermatologic: vesiculobullous eruptions, urticaria, erythema multiforme, Stevens-Johnson syndrome and alopecia. *Special Senses:* hearing loss, amblyopia (blurred and/or diminished vision, scotomata and/or changes in color vision) (see PRECAUTIONS). Hematologic: neutropenia, agranulocytosis, aplastic anemia, hemolytic anemia (sometimes Coombs' positive), thrombocytopenia with or without purpura eosinophilia, decreases in hemoglobin and hematocrit. Cardiovascular: congestive heart failure in patients with marginal cardiac function, elevated blood pressure. Allergic: syndrome of abdominal pain, fever, chills, nausea and vomiting, anaphylaxis, bronchospasms (see CONTRAINDICATIONS). Renal: acute renal failure in patients with preexisting significantly impaired renal function, decreased creatinine clearance, polyuria, azotemia, cystitis, hematuria. Miscellaneous: dry eyes and mouth, gingival ulcers, rhinitis.

Causal relationship unknown. Gastrointestinal: pancreatitis. Central Nervous System: paresthesias, hallucinations, dream abnormalities, pseudotumor cerebri. Dermatologic: toxic epidermal necrolysis, photoallergic skin reactions. Special Senses: conjunctivitis, diplopia, optic neuritis. Hematologic: bleeding episodes. Allergic: serum sickness, lupus erythematosus syndrome, Henoch-Schonlein vasculitis. Endocrine: gynecomastia, hypoglycemia. Cardiovascular: arrhythmias (sinus tachycardia, bradycardia, and palpitations). Renal: renal papillary necrosis.

OVERDOSAGE: Acute overdosage, the stomach should be emptied. Rufen is acidic and excreted in the urine, alkaline diuresis may benefit.

DOSAGE AND ADMINISTRATION: Rheumatoid arthritis and osteoarthritis, including flareups of chronic disease. Suggested dosage 400 mg t.i.d. or q.i.d.

Dysmenorrhea: 400 mg every 4 hours as necessary.

Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for the relief of pain. *Do not exceed 2,400 mg per day.*

CAUTION: Federal law prohibits dispensing without prescription.

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Candidates for nutritional therapy...

10,000,000 alcoholics. Ethanol may produce many effects that together bring about nutritional deficiencies, so that alcoholism affects nutrition at many levels.[1]

25,500,000 geriatric patients. The older patient may have some disorder or socio-economic problem that can undermine good nutrition.[2]

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Indications: Prophylactic or therapeutic nutritional supplementation in physiologically stressful conditions, including conditions causing depletion, or reduced absorption or bioavailability of essential vitamins and minerals; certain conditions resulting from severe B-vitamin or ascorbic acid deficiency; or conditions resulting in increased needs for essential vitamins and minerals.
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Warnings: Not for pernicious anemia or other megaloblastic anemias where vitamin B_{12} is deficient. Neurologic involvement may develop or progress, despite temporary remission of anemia, in patients with vitamin B_{12} deficiency who receive supplemental folic acid and who are inadequately treated with B_{12}.
Precautions: *General:* Certain conditions may require additional nutritional supplementation. During pregnancy, supplementation with vitamin D and calcium may be required. Not intended for treatment of severe specific deficiencies. *Information for the Patient:* Toxic reactions have been reported with injudicious use of certain vitamins and minerals. Urge patients to follow specific dosage instructions. Keep out of reach of children. *Drug and Treatment Interactions:* As little as 5 mg pyridoxine daily can decrease the efficacy of levodopa in the treatment of parkinsonism. Not recommended for patients undergoing such therapy.
Adverse Reactions: Adverse reactions have been reported with specific vitamins and

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5,000,000 hospital patients with infections.[4] Many are anorectic and may have a markedly reduced food intake. Supplements are often provided as a prudent measure because the vitamin status of critically ill patients cannot be readily determined.[3]

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References: 1. Shaw S, Lieber CS: Nutrition and alcoholism, chap. 40, in *Modern Nutrition in Health and Disease*, edited by Goodhart RS, Shils ME. Philadelphia, Lea & Febiger, 1980, pp. 1220, 1237. 2. Watkin DM: Nutrition for the aging and the aged, chap. 28, in *Modern Nutrition in Health and Disease, op. cit.*, p. 781. 3. Shils ME, Randall HT: Diet and nutrition in the care of the surgical patient, chap. 36, in *Modern Nutrition in Health and Disease, op. cit.*, pp. 1084, 1089, 1114. 4. Dixon RE: *Ann Intern Med 89* (Part 2): 749-753, Nov 1978. 5. Committee on Dietary Allowances, National Research Council: Recommended Dietary Allowances, ed 9. Washington, National Academy of Sciences, 1980, p. 13.

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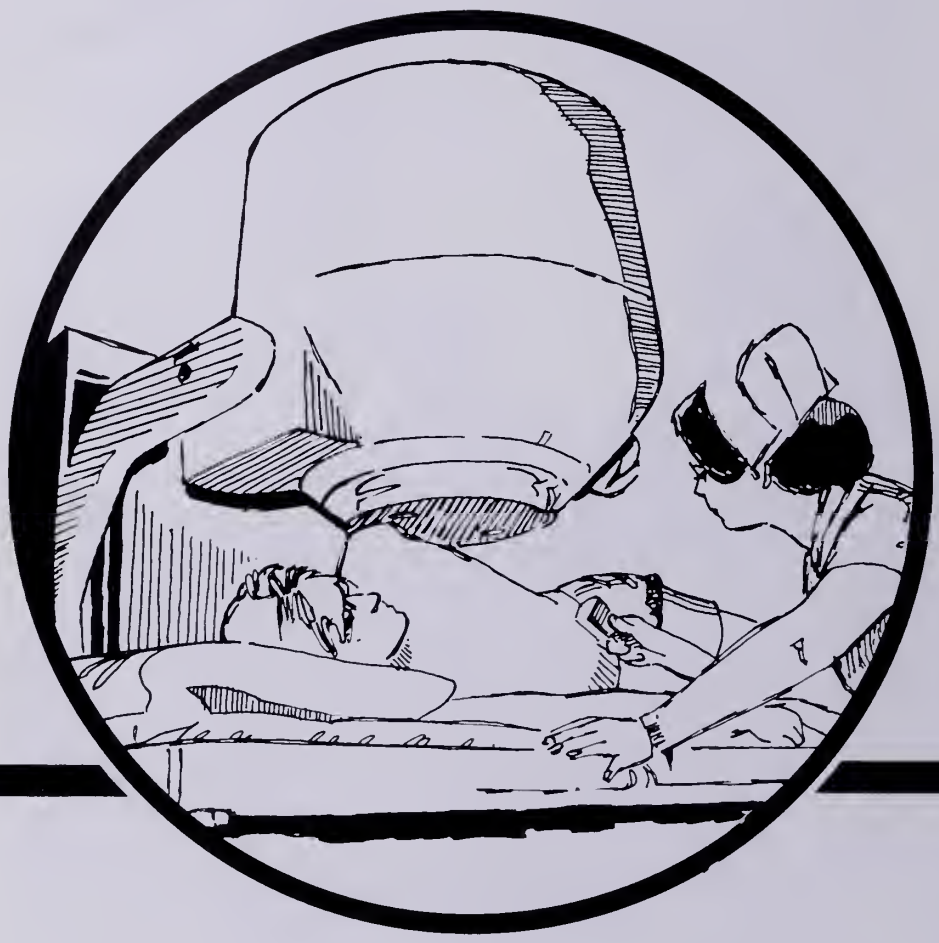

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In the treatment of insomnia

Good mornings start with restful nights.

Dalmane *(flurazepam HCl/Roche)* patients fall asleep faster, sleep longer and seldom awaken with morning hangover.

Feeling well rested in the morning usually means having slept well the night before. And for insomniac patients receiving hypnotic therapy, a good morning also means awakening with few side effects from their medication. Many physicians choose Dalmane for their patients who suffer from insomnia for this very reason.

Aside from enabling patients to fall asleep more quickly and sleep longer, Dalmane seldom causes morning hangover. Most Dalmane patients feel alert and refreshed when they awaken. In 53 paired-night clinical studies comparing Dalmane and placebo in 2010 insomniac patients with a variety of secondary diagnoses, most Dalmane patients awakened more alert and refreshed, and less groggy and drowsy, than on nights when they had taken only placebo.[1] In a double-blind crossover study of 42 patients in private practice, approximately three times as many patients reported feeling refreshed and alert upon awakening after a night on Dalmane (flurazepam/Roche) compared to placebo nights.[2] This difference was highly significant ($p<0.001$). And a retrospective study of 2542 hospitalized patients who received Dalmane revealed only a 3.1% incidence of side effects.[3]

While residual effects from Dalmane therapy are infrequent, patients should be cautioned about drinking alcohol, driving or operating hazardous machinery after ingesting the drug.

Efficacy and safety in a broad range of patient types.

Over 2000 clinical trials involving more than 10,000 patients have shown that Dalmane patients fall asleep sooner, sleep longer and experience fewer nocturnal awakenings.[4] The safety and efficacy of Dalmane have been demonstrated in medical and surgical hospitalized patients, in patients seen in office practice and in elderly patients.[5-8] Since the risk of oversedation, dizziness, confu-

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sion and/or ataxia increases with larger doses in the elderly, it is recommended that the dosage be limited to 15 mg.

Moreover, the efficacy and safety of Dalmane for the treatment of insomnia have been demonstrated in thousands of patients with a variety of primary medical conditions, including cardiovascular, neuropsychiatric, endocrine-metabolic, gastrointestinal, genitourinary, respiratory and musculoskeletal disorders.[1] Dalmane (flurazepam HCl/Roche) is contraindicated in pregnancy and in patients hypersensitive to the drug.

Avoids rebound insomnia upon discontinuation.

Rebound insomnia—a worsening of sleep beyond pretherapy levels after drug discontinuation—has been reported as a potential clinical problem with some hypnotics.[9,10] However, this problem has not been reported with Dalmane. In eight out of eight sleep laboratory studies, there were no reports of rebound insomnia.[11] When you prescribe Dalmane, you can be confident of efficacy that enhances therapeutic progress. Your insomniac patients can be assured of a restful night, night after night—a good start for a good morning.

References: **1.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **2.** Zimmerman AM. *Curr Ther Res 13*:18-22, Jan 1971. **3.** Greenblatt DJ, Allen MD, Shader RI: *Clin Pharmacol Ther 21*:355-361, Mar 1977. **4.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **5.** Meyer JA, Kurland KZ: *Milit Med 138*:471-474, Aug 1973. **6.** Feffer HL, Gibbons B: *Med Times 101*(8):130-135, Aug 1973. **7.** Jacobson A *et al*: *Psychophysiology 7*:345, Sep 1970. **8.** Frost JD Jr, DeLucchi MR. *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 1978. **10.** Kales A *et al*: *JAMA 241*:1692-1695, Apr 1979. **11.** Monti JM: *Methods Find Exp Clin Pharmacol 3*(5):303-326, 1981.

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15-mg/30-mg capsules

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended. Repeated therapy should only be undertaken with appropriate patient evaluation.

Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patient to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl

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- Eases breathing • Reduces sneezing
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Tablets

DESCRIPTION

Each prolonged action tablet contains:

Phenylephrine Hydrochloride	25 mg
Phenylpropanolamine Hydrochloride	50 mg
Chlorpheniramine Maleate	8 mg
Hyoscyamine Sulfate	0.19 mg
Atropine Sulfate	0.04 mg
Scopolamine Hydrobromide	0.01 mg

Ru-Tuss Tablets act continuously for 10 to 12 hours.

Ru-Tuss Tablets are an oral antihistaminic, nasal decongestant and anti-secretory preparation

INDICATIONS AND USAGE Ru-Tuss Tablets provide relief of the symptoms resulting from irritation of sinus, nasal and upper respiratory tract tissues Phenylephrine and phenylpropanolamine combine to exert a vasoconstrictive and decongestive action while chlorpheniramine maleate decreases the symptoms of watering eyes, post nasal drip and sneezing which may be associated with an allergic-like response The belladanna alkaloids, hyoscyamine, atropine and scopolamine further augment the anti-secretory activity of Ru-Tuss Tablets.

CONTRAINDICATIONS Hypersensitivity to antihistamines or sympathomimetics Ru-Tuss Tablets are contraindicated in children under 12 years of age and in patients with glaucoma, bronchial asthma and women who are pregnant Concomitant use of MAO inhibitors is contraindicated

WARNINGS Ru-Tuss Tablets may cause drowsiness Patients should be warned of the possible additive effects caused by taking antihistamines with alcohol, hypnotics, sedatives or tranquilizers

PRECAUTIONS Ru-Tuss Tablets contain belladonna alkaloids, and must be administered with care to those patients with glaucoma, or urinary bladder neck obstruction Caution should be exercised when Ru-Tuss Tablets are given to patients with hypertension, cardiac or peripheral vascular disease or hyperthyroidism Patients should avoid driving a motor vehicle or operating dangerous machinery (See Warnings)

OVERDOSAGE Since the action of sustained release products may continue for as long as 12 hours, treatment of overdoses directed at reversing the effects of the drug and supporting the patient should be maintained for at least that length of time Saline cathartics are useful for hastening evacuation of unreleased medication. In children and infants, antihistamine overdosage may produce convulsions and death

ADVERSE REACTIONS Hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis, and thrombocytopenia may occur Other adverse reactions to Ru-Tuss Tablets may be drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, tachycardia, hypotension hypertension, faintness, dizziness, tinnitus, headache, incoordination, visual disturbances, mydriasis, xerotomia, blurred vision, anorexia, nausea, vomiting, diarrhea, constipation, epigastric distress, hyperirritability, nervousness, dizziness and insomnia Large overdoses may cause tachypnea, delirium, fever, stupor, coma and respiratory failure

DOSAGE AND ADMINISTRATION Adults and children over 12 years of age, one tablet morning and evening Not recommended for children under 12 years of age Tablets are to be swallowed whole

HOW SUPPLIED:

Bottles of 100 Tablets	NDC 0524-0058-01
Bottles of 500 Tablets	NDC 0524-0058-05

Federal law prohibits dispensing without prescription

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RU-TUSS®

Expectorant

DESCRIPTION

Each fluid ounce of Ru-Tuss Expectorant contains.

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Phenylpropanolamine Hydrochloride	20 mg
Pheniramine Maleate	20 mg
Pyrilamine Maleate	20 mg
Ammonium Chloride	200 mg
Alcohol	5%

Ru-Tuss Expectorant is an oral antitussive, antihistaminic, nasal decongestant and expectorant preparation.

INDICATIONS AND USAGE Ru-Tuss Expectorant is indicated for symptomatic relief of upper respiratory congestion associated with pharyngitis, trachetis, bronchitis, and allergic rhinitis Also, for the temporary relief of symptoms associated with hay fever, allergies, nasal congestion and cough due to the common cold

CONTRAINDICATIONS Hypersensitivity to antihistamines. Concomitant use of an antihypertensive or antidepressant drug containing a monoamine oxidase inhibitor is contraindicated

Ru-Tuss Expectorant is contraindicated in patients with glaucoma, bronchial asthma and in women who are pregnant

WARNINGS Ru-Tuss Expectorant contains codeine phosphate, therefore, the patient should be warned of the potential that this drug may be habit forming Ru-Tuss Expectorant may cause drowsiness Patients should be warned of the possible additive effect caused by taking antihistamines with alcohol, hypnotics, sedatives and tranquilizers.

PRECAUTIONS Patients taking Ru-Tuss Expectorant should avoid driving a motor vehicle or operating dangerous machinery (See Warnings) Caution should be taken with patients having hypertension, diabetes, hyperthyroidism and cardiovascular disease

Caution should also be used in patients with pulmonary, hepatic or renal insufficiency

ADVERSE REACTIONS Ru-Tuss Expectorant may cause drowsiness, lassitude, giddiness, dryness of mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, tachycardia, hypotension hypertension, faintness, dizziness, tinnitus, headache, incoordination, visual disturbances, mydriasis, xerostomia, blurred vision, anorexia, nausea, vomiting, diarrhea, constipation, epigastric distress, hyperirritability, nervousness, and insomnia. Overdoses may cause restlessness, excitation, delirium, tremors, euphoria, metabolic acidosis, stupor, tachycardia and even convulsions.

DOSAGE AND ADMINISTRATION Adults· 1 or 2 teaspoonfuls, orally, every 4 hours, not to exceed 10 teaspoonfuls in any 24-hour period

Children 6 to 12 years of age ½ the adult dose, not to exceed 6 teaspoonfuls in any 24-hour period Children 2 to 6 years of age: ½ teaspoonful every 4 hours, not no exceed 3 teaspoonfuls in any 24-hour period Children under 2 years of age· Use as directed by a physician

HOW SUPPLIED: (16 fl oz)

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Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication, abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed, drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.
The clearance of Valium and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.
Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported, should these occur, discontinue drug. Isolated reports of neutropenia, jaundice, periodic blood counts and liver function tests advisable during long-term therapy.
Dosage: Individualize for maximum beneficial effect. *Adults:* Anxiety disorders, symptoms of anxiety, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).
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The West Virginia Medical Journal

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Presidential Address*

JOHN B. MARKEY, M. D.
Charleston, Immediate Past President, West Virginia State Medical Association

This is the finale of my year as President of the State Association.

First, I want to thank Betty, Barbara and Sandy: without their encouragement, this would not have been possible.

Betty and I started September 1st of 1981 on our visits to the component societies. We traveled about 20,000 miles during the year with trips to the AMA meetings, to neighboring states and within West Virginia. We made all of these visits together; she critiqued my speeches and early advised me to *talk* to people and not to give a sermon, which was excellent advice. One of the outstanding benefits of the past year was an opportunity for Betty and I to spend more time together than we normally do at home because of her activities and my practice. For this, we are both very thankful. We met hundreds of people and, hopefully, made many new friends.

Throughout our travels, I have spoken to the issues as I perceived them, just as I have done on the President's Page of our state *Journal*.

One objective a year ago was to address the issues that face us as physicians and as members of organized medicine. I think that my comments to the various societies and on the President's Page attest to my adherence to that objective.

Second was to issue a challenge to all physicians in the state to stop the self-adulation we indulge in whenever and wherever two or more of us meet. Rather, we should use the fact that we do indeed provide the highest quality of medical care anywhere in the world as a foundation not to stand on, but to build on.

My next objective was to induce all doctors in the state to offer that high-quality medical care to all patients regardless of their pay category, and to do it in a cost-conscious, cost-effective manner. To accept our responsibility and

John B. Markey, M. D.

*Presented at the second and final session of the House of Delegates, 115th Annual Meeting of the West Virginia State Medical Association, the Greenbrier, White Sulphur Springs, W. Va., Saturday, August 28, 1982.

obligations as physicians and citizens of this state and nation. TO LEAD.

Next was to work for a stronger, more unified and bigger state organization. An Association more responsive to the problems we face. The whole is the sum total of its parts: therefore, each of us must be stronger and more responsive to the issues we face. Then indeed the whole will be so. How successful I have been in my objectives you must decide while I surmise hopefully.

Some of the problems we faced a year ago are still with us today. In response to this, our Legislative Committee must be ever vigilant and active. As I have stated before, how we practice Medicine will in many ways be more and more affected in the future by legislative acts at the state and national levels. So much so that the excellence of our training may be overshadowed.

Since the poor will be with us always, our problems with the Department of Welfare will continue. We have managed this year to get the Department to accept standard billings forms rather than the cumbersome idiocy devised by bureaucrats of apparently the same mentality. Hopefully, one day we will have a Department and a Commisioner thereof who can appreciate the bureaucratic problems we encounter in providing care for the poor—problems which discourage some physicians from providing that care.

The malpractice crisis will continue, for we live in a litigation-prone society whose avarice, most often frivolous, is flamed by the thousands of attorneys who view misadventures in Medicine as a license not to obtain justice, but to extract tremendous fees, and who expect diety-like perfection from physicians when, at the same time, the Chief Justice of the Supreme Court, Warren Burger, states publicly that the majority of attorneys are not adequate to represent their clients properly.

We must, therefore, further strengthen our insurance program and, secondly, we must as individuals and as an Association work for tort reform through the legislative process.

As I asked in one issue of the *Journal*, three? I feel that this Association should study whether or not West Virginia can afford three first-class medical schools. If we can, so be it; if we cannot, what are the alternatives and what should our position be?

Competition Growing

The pro-competition plan of the present Administration apparently is slowed for the time being. With medical schools in this country graduating greater numbers of physicians, and with other pathways for entry into medical practice available, competition itself will become a problem. From the point of economic reality, fees for service, rather than falling, will continue to rise. With more physicians, the ratio of patients will fall and, with increasing overhead costs, those fewer patients per doctor will have to meet those overhead costs, thereby necessitating even higher fees. We see evidence of this in areas of this country already. This will be a time when we will need to maintain even more our intellectual honesty, integrity and our professionalism so that we are not tempted to exploit our patients for financial gain.

Thanks to Mr. Lewis and all members of our Association office staff — Custer, Bob, Mary, Mary Sue, Sue and Beverly. Through their cooperation and help, my role as President was made much easier. To the committee chairmen and members who worked hard, I say thanks. To the officers and members of the societies we visited — we were received everywhere warmly and cordially — we thank you.

Doctor Fix was a difficult act to follow. However, I do feel that during this past year, efforts have resulted in an Association that is financially sound, stronger in numbers and stronger in resolve. My successor, Doctor Shannon, also will provide leadership that will further better our Association. An incoming President should not be encumbered by his predecessor. I will, however, do for the Association whatever he feels I can.

I want to thank you, the Association, for the honor and privilege of being permitted to serve as your President. Throughout the year, I have tried to be worthy of that honor.

In closing I would challenge you, the Association, to seek, to strive, to find, and not to yield.

Phenytoin Overdose With High Plasma Levels (Case Report)

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Phenytoin overdoses have been reported only rarely despite widespread use for over 40 years. The degree of neurotoxicity is variable even with markedly elevated plasma drug concentrations. Because of the drug's delayed absorption and nonlinear elimination kinetics, severely poisoned patients may require hemoperfusion therapy. This article describes a patient with one of the highest recorded plasma concentrations of phenytoin (80 μg/ml), who experienced only mild neurological toxicity and had a benign clinical course.

SINCE its first use in 1938, phenytoin has achieved a remarkable safety record and remains a widely-used anticonvulsant drug. Accidental and intentional overdoses with phenytoin are relatively rare. Severe toxicity with associated plasma phenytoin levels in excess of 50 μg/ml due to either overdose or iatrogenic causes has been reported only in about 25 patients. Accidental overdoses tend to occur in small children who ingest large amounts of medication prescribed for another family member. Most adults attempting suicide have been under treatment with phenytoin either singly or in combination with another anticonvulsant drug.

Case Report

A 21-year-old white male with a history of grand mal seizures since age nine ingested approximately 75 100-mg. phenytoin capsules in a suicide attempt. His medications included 100-mg. phenytoin four times a day, 60-mg. phenobarbital and 4-mg. perphenazine three times a day. Following an argument with his girlfriend, he left a suicide note approximately eight hours prior to being brought to the emergency room.

On admission he was intermittently confused, with blood pressure 122/90, heart rate 96 and regular, respirations 24, and temperature 99.5°F. There was no evidence of trauma. The pupils were equal and slightly dilated, sluggishly reactive, and there was marked nystagmus on lateral gaze. The patient was oriented as to time, place and person, but intermittently hallucinating, claiming "the walls are melting" and imagining flashing lights and moving objects. There were resting tremor and frequent myoclonic movements of the upper extremities. The reflexes were uniformly hyperactive with bilateral ankle clonus but no pathological reflexes.

A toxicology screen was negative for ethanol, benzodiazepines, meprobamate, propoxyphene, and methaqualone. Serum transaminases (SGOT, SGPT) and gamma-glutamyltranspeptidase were elevated on admission but gradually returned to normal over five days. Serum bilirubin and plasma proteins were normal. EKG and chest x-ray were within normal limits.

The patient was treated initially with 30 ml. syrup of ipecac p.o. No drug particles were identified in the vomitus. Activated charcoal, 25 grams, was given. The patient remained agitated, requiring physical restraints and moderate sedation with haloperidol and oxazepam. He continued to hallucinate intermittently but remained oriented. After three days, he became calm and fully alert with only residual lateral nystagmus.

Plasma phenytoin concentration was 65 μg/ml on admission. The next day it was 80 μg/ml; then 66, 68 and 46 μg/ml on the third, fourth, and fifth days, respectively. After six days, when the phenytoin level was 35 μg/ml, he suffered two grand mal seizures, and anticonvulsant drug therapy was reinstituted.

Discussion

In 40 years of use, phenytoin has compiled an impressive record of safety. This patient represents only the eighth reported case of suicide attempt with this drug. There have been three fatalities and five survivors, including our patient, in spite of his remarkably high plasma level of 80 μg/ml. Higher plasma levels have been reported in small children following accidental ingestion. Two with plasma phenytoin levels of 90-100μg/ml died.[1,2] Another five-year-old mistakenly given 500 mg. phenytoin instead of 50 mg/day became progressively comatose over a three-week period and attained a plasma level of 112 μg/ml[3] but recovered with peritoneal dialysis. A two-year-old child with a level of 108 μg/ml also survived accidental overdose.[4]

Deaths have been recorded with phenytoin overdose at lower plasma concentrations in the range of 50-70 $\mu g/ml$. Patients on chronic phenytoin therapy seem to have a greater tolerance to overdose and may suffer less severe central nervous system (CNS) toxicity.

Absence of severe CNS depression in our patient is particularly noteworthy, given the high drug levels. He manifested primarily hyperactivity with intermittent hallucinations and generalized hyperreflexia rather than depression as reported by others.[1,3] Despite the significant cardiac effects of phenytoin, cardiotoxicity was not encountered.

In our patient, phenytoin levels remained markedly elevated over the first 72 hours with little dropoff. This seems to be a consistent finding with overdose, and probably is attributable to the extremely low solubility of this drug. Significant amounts remain in an insoluble state in the intestine where the drug slowly dissolves and is absorbed. Repeated administration of activated charcoal should diminish this late absorption phase from the gut. Also, the primary metabolic pathway of para-hydroxylation is saturable, and the drug follows nonlinear elimination kinetics. Thus, consideration should be given to hemoperfusion in extremely toxic patients with plasma levels $>60\mu g/ml$.[5]

The mildly abnormal liver function tests on our patient were attributed to a history of prior ethanol abuse. Phenytoin can cause hepatotoxicity,[6] but typically due to hypersensitivity with fever, lymphadenopathy and rash.[7]

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Current Concepts In Vasectomy Reversal

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Modern methods for vasectomy reversal using magnification during vasovasostomy have led to improved patency and pregnancy rates. A comparison of the most common techniques for vasovasostomy and their results are presented. The most important factors influencing results are discussed here. Vasectomy reversal can now be achieved in a majority of patients who have a favorable assessment and findings before surgery and during surgery.

THE first significant series of vasovasostomies was reported by O'Connor in 1948, and technically employed an end-to-end anastomosis over a silkworm gut stent.[1] The stent was brought out through the skin, and stainless steel wire sutures were used in the anastomosis. Over the ensuing years other surgeons have described many alternative techniques.[2-8] These include the use of nonabsorbable versus absorbable anastomotic sutures, from 5-0 to 10-0 size; nonabsorbable stents versus absorbable stents versus no stents; single layer versus double layer closures; and macroscopic versus microscopic techniques. Patency and pregnancy rates after vasovasostomy have continued to improve steadily. With better results obtained with vasovasostomy, vasectomy may become an even more popular form of birth control because of the improved potential for reversibility. The most widely used techniques and results achieved will be reviewed.

Indications for Vasovasostomy

The number of patients seeking vasectomy reversal is increasing. The usual reasons for which a patient seeks this procedure include one or more of the following: a new wife desiring children; death of an offspring; change of ideas in a patient who desired sterilization at an earlier age for social reasons; or improved economic status making more children possible.[7] Although the vast majority of patients are counseled as to the irreversibility of vasectomy when it is initially performed, patients and their spouses are being educated as to the possibility of reversal. In fact, it often is the spouse who initiates and follows through on attempts at reversal. This trend is due in part to the widespread publicity that vasovasostomy and, indeed all microsurgical techniques, recently have received in the lay press.

Techniques of the Vasovasostomy

Techniques include macroscopic anastomosis with or without loupe magnification (2X to 3.5X) and microscopic anastomosis with 16-power to 25-power magnification. In the macroscopic procedure, from four to eight sutures are placed, full thickness, joining the cut ends of the vas. Usually, 5-0 to 7-0 nonabsorbable sutures are utilized. An absorbable stent of 3-0 plain cat gut may or may not be utilized.

The microscopic technique employs 7-0 to 9-0 nonabsorbable sutures in one or two layer closures. The emphasis here is on mucosal approximation. With the increased acuity afforded by the microscope, a stent usually is not necessary. The advantages of the microsurgical technique include the ability to reapproximate mucosa to mucosa accurately and to perform epididymovasostomy, if necessary. There are several drawbacks to this procedure, including the need for special equipment and increased operative time. A good result also necessitates specialized training and frequent practice to become and remain fluent in the use of the microscope. The latter is especially true in performing epididymovasostomy. Furthermore, if the macroscopic procedure fails it can always be repeated utilizing the microscope with little increase in difficulty.

Our technique employs 3.5-power loupe magnification. The cut ends of the vas deferens are identified, delivered through the wound, and the ends resected. The revised penile end of the vas deferens is dilated with a #5 jeweler's forceps. The revised testicular end does not require dilatation since it already usually is dilated. If seminal fluid is not seen effluxing from the testicular end, more of the vas is resected. This process is continued until fluid is seen and examined for sperm or the epididymis is approached. The ends are flushed with saline through a blunted needle. The anastomosis is then performed utilizing a microvascular clamp to maintain the ends in approximation. Six full-thickness sutures of 6-0 or 7-0 nylon are placed over a 3-0 plain cat gut stent. The fascia is approximated to remove tension from the anastomosis. A quarter-inch Penrose drain is

left in the wound for 24 hours. The patient remains at bedrest overnight, is discharged the following day after surgery, and utilizes a scrotal support for three weeks postoperatively.

Results

There have been several techniques described for vasovasostomy (Table). O'Connor presented the first series in 1948.[1] He employed the use of direct vision and an external stent composed of silkworm gut. No statistics on pregnancy rate were given in his presentation. Several other authors described techniques utilizing direct vision. Phadke and Phadke utilized an external nylon stent and achieved a patency rate of 83 per cent and pregnancy rate of 55 per cent.[6] Rowland *et al.* contrasted the use of an external silkworm gut stent with the use of an internal plain cat gut stent.[9] They obtained 67 per cent and 86 per cent patency rates, respectively, with pregnancy rates of 29 per cent in each case. These only reflect preliminary results with the use of internal cat gut stent since eight of 14 patients were followed for less than one year at the time of publication.

Lee & McLoughlin contrasted the use of direct vision and a monofilament nonabsorbable stent with the use of the operating microscope and no stent.[10] They obtained 90 per cent and 96 per cent patency rates and 46 per cent and 54 per cent pregnancy rates, respectively. Although these results are not statistically significant, they do demonstrate a trend which can be found throughout the studies listed in the Table; that is, the surgeons using magnification, either microscopic or loupe, generally obtained a higher patency and pregnancy rate. Our technique utilized loupe magnification and an internal plain cat gut stent. Although our series presently is small, our results appear to be comparable to recent reports.

As noted from the data presented above, significant improvements in patency rate have been obtained utilizing modern techniques. Nonetheless, there remains a marked discrepancy in pregnancy rates. The actual reason for this discrepancy remains unknown. Several factors probably contribute to the overall picture. To understand these factors one must recall the original procedure for vasectomy.

When the cut testicular end of the vas deferens is simply ligated, a sperm granuloma will develop up to 30 per cent of the time. If the cut testicular end is cauterized, a granuloma develops in only approximately one per cent of the cases.[3] When this granuloma is absent at the cut end of the vas there is a pressure build-up in the testicular portion of the vas deferens causing a dilatation of the lumen and some degeneration of the contained sperm. This pressure subsequently backs up throughout the testicular end of the vas deferens and epididymis, and ultimately will result in a rupture of the thin epididymal wall with secondary epididymal granulomas. Formation of epididymal granulomas can cause a perfect vasovasostomy to fail to produce a pregnancy.[3,11] For this reason a granuloma at the cut end of the vas deferens acts like a safety valve to protect the epididymis. Another potential reason for a decreased pregnancy rate postoperatively may be the stimulation of antisperm antibodies caused by absorption of sperm.[12]

TABLE

Methods of Vasovasostomy and Results

Study	*Number of Patients*	*Magnification*	*Stent*	*% Patent*	*% Pregnant*
O'Connor[1]	48	direct vision	external silkworm gut	60	—
Rowland *et al.*[9]	21	direct vision	external silkworm gut	67	29
Rowland *et al.*[9]	14	direct vision	internal plain cat gut	86	29+
Middleton & Henderson[5]	72	direct vision	none	74	39
Phadke & Phadke[6]	76	direct vision	external nylon monofilament	83	55
Lee & McLoughlin[10]	61	direct vision	nonabsorbable stent	90	46
Lee & McLoughlin[10]	26	microscopic	none	96	54
Willscher & Novicki[4]	12	microscopic	none	83	50
Silber *et al.*[13]	34	microscopic	none	100	59*
Silber[11]	42	microscopic	none	93	71
Amelar & Dubin[7]	23	4x loupe	none	88	53

+ less than one year follow-up in eight patients.

* within the first year.

Surgical Maneuvers

At surgery certain maneuvers can be utilized to optimize the end result. For example, if sperm are seen in the fluid collected from the cut testicular end of the vas deferens, chances are twice as great that postoperative sperm counts will be normal.[13] If no fluid is seen from the testicular end, a portion of this end should be resected in an effort to find some fluid. However, this dissection should not be carried onto the epididymis unless one has the equipment and capability of performing an epididymovasostomy. It should be recalled that a vasovasostomy, if unsuccessful, can always be revised with little increase in difficulty. On the other hand, an epididymovasostomy is a very difficult procedure, and should not be attempted casually.[3]

Another factor which appears to affect the pregnancy rate is the duration between vasectomy and attempts at reversal. Patients undergoing vasectomy reversal less than 10 years after the initial vasectomy ultimately will achieve a normal sperm count twice as often as those patients undergoing reversal 10 years or more after vasectomy.[11]

The results of a vasectomy reversal vary greatly from one series to another when different techniques are employed. Patency rates between 60 per cent and 100 per cent, and pregnancy rates between 29 per cent and 71 per cent have been reported (Table). Although no single technique has proven to be satistically superior to all the others, certain trends have emerged. Absorbable stents appear to be superior to nonabsorbable stents. This probably is due to the formation of a granuloma and obstruction at the site of exit of the nonabsorbable stent.[7] Anastomoses with magnification generally produce better results than nonmagnified anastomoses. In the case of epididymovasostomy, only microscopic anastomoses should be performed. There are several problems related to the performance of microscopic anastomoses, and these have been discussed. In summary, modern techniques for vasovasostomy have led to an improved potential for pregnancy when vasectomy reversal is desired.

Summary

The feasibility of a vasectomy reversal has been discussed. The ability to obtain pregnancy in approximately 50 per cent of the cases should be expected. These statistics continue to improve although there remains a discrepancy between patency rates and pregnancy rates obtainable. The reason for this discrepancy remains unknown although some potential factors are discussed. It is noted that better results are obtained when one surgeon performs the procedure regularly, especially when magnification is employed. Both macroscopic and microscopic techniques are discussed, and it is noted that success can be achieved utilizing either. Although there is no statistical evidence for the superiority of one over the other, better results appear to be obtained when magnification is employed. Finally, if a macroscopic procedure is utilized, either under direct vision or with loupe magnification, and fails, it can always be repeated using a microscopic approach. The use of the microvascular clamp in performance of vasovasostomy is described.

We believe modern techniques such as those employed at our institution can reverse sterility after vasectomy in the majority of patients. Furthermore, this technique should be offered to patients seeking vasectomy reversal.

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Special Article

Financing Of The West Virginia University School Of Medicine

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The State Medical Association Liaison Committee to the West Virginia University School of Medicine, with the hope of fostering a better understanding of the school's budget problems, asked that a report outlining the budget be prepared for The West Virginia Medical Journal. *The complexity and misunderstanding concerning the financing of the School of Medicine, and the WVU Medical Center in general, is separate from, but related to, criticism recently directed at the WVU medical practice plan.*

The need for generation of income by faculty-physician involvement in actual patient care to support education and research programs is increasingly apparent, not only to WVU but to all U.S. medical schools. The WVU medical practice plan is a creative model that combats the growth of bureaucracy; is consistent with state laws, and contributes substantially to the budget of the School of Medicine. The similarity of the practice plans of 110 of the 112 U.S. medical schools having plans; and the more than 11 years of responsible and strongly accountable contributions by the WVU medical practice plan to programs dedicated to excellence in medical education, patient services and medical research, are compelling arguments against changing current practice plan arrangements.

FUNDING for the WVU Medical Center was initiated in 1951 by the penny-a-bottle soft drink tax legislation and creation of the Medical School Fund (State Budget Account No. 9280). Receipts for this fund are generated by the soft drink tax, a legislative appropriation from general revenue, other local receipts like tuition and interest on state investments, the beginning balance and WVU Hospital receipts. The account includes line items supporting the WVU Family Practice Program and the Community Hospital Residency Support Program. Funds provided in this account are expected to support health professional education, Medical Center support systems and other items. Here is the list:

Medical Center Support Systems: These include the health sciences library, physical plant management, utilities and central university administrative systems. These costs have not been allocated to the various health professional schools because there are no universally-accepted definitions related to such allocations, and they vary from school to school. The budget for these several items for 1981-82 was $7,142,030, and projected for this year (fiscal 1982-83) at $6,937,448.

School of Medicine: Will be discussed separately below.

School of Nursing: Established in 1960 with a first class of 31, it has grown to a class of 76 with 300 undergraduates and 53 graduate students, plus outreach programs that enroll 94 students in Charleston, Parkersburg and Shepherdstown. The School's 1981-82 budget was $1,553,114, and the 1982-83 projected budget is $1,546,949.

School of Dentistry: Opened in 1957 with a class of 30, it now has 247 dental students, 99 in dental hygiene and 18 in post-doctoral programs. Outreach experience is available for students at nine locations around West Virginia. The 1981-82 budget was $4,150,974, and the projected 1982-83 budget is $4,004,-334. The School of Dentistry has a dental practice plan that operates essentially as does the School of Medicine's practice plan, and for the same reasons. Estimated income for 1981-82 was $1.0 million, and for 1982-83 is $1.1 million.

School of Pharmacy: While the School of Pharmacy is housed in the Medical Center, its funding, except student tuition, comes from the general university state appropriation. The School of Pharmacy received $48,000 in 1981-82 and a like amount in 1982-83 from the Medical Center budget.

Community Hospital Residency Program: This is a pass-through item in the WVU Medi-

cal Center budget: a line item administered by the Medical Center with funds distributed to community hospitals based on their number of medical residents. Community hospitals are reimbursed for family practice residents at approximately $12,000 each, while reimbursement for other residents is much less. This line item had amounted to $944,542 the past two years, but the allocation was reduced by the 1982 Legislature to $700,000 for 1982-83. None of this money is spent at the WVU Medical Center.

Family Practice Program: This program is funded by a separate line item in the state budget amounting to $828,160 for 1981-82 and $813,094 for this current 1982-83 fiscal year. Department of Family Practice funds have been included in the analysis of the School of Medicine and the medical practice plan below.

Charleston and Wheeling Divisions: The Charleston Division of the WVU Medical Center was established in 1972, and its growth greatly accelerated under a federal Area Health Education Center (AHEC) contract. Through the generosity of Mr. William Maier and state funding, an educational building was constructed to house the programs. Each of the University's four health professional schools sponsors educational activities in the Charleston Division, including complete programs for the last two years of medical education. The Charleston Division is active in allied health programs through affiliation with the Charleston Area Medical Center and has a strong commitment to continuing education in Charleston and several remote sites throughout the state. The Charleston Division was budgeted for $2,911,303 for 1981-82 and is projected to receive $2,751,451 in the 1982-83 fiscal year. All costs related to the school of Medicine activities in the Charleston Division have been included in the School of Medicine section below.

The Wheeling Division of the School of Medicine was established in 1974, and offers many educational experiences for senior medical students. The Wheeling Division was funded at $199,296 for 1981-82 and is projected at $240,208 for 1982-83. These costs are also included in the School of Medicine section below.

University Hospital: WVU Hospital generates revenue sufficient to cover all its direct expenses (salaries, fringe benefits, utilities and maintenance), but is dependent upon tax support for capital projects. Hospital-generated revenue cannot be used to support educational programs. Because of the economy of the nation and state, 10 to 12 per cent of University Hospital's patient volumes consist of charity patients. University Hospital revenue was budgeted at $40,000,000 for 1981-82 and is projected to be $42,650,000 for 1982-83.

The Medical School Fund

It is readily apparent that the "Medical School" fund designation is misleading since the funds in Account No. 9280 are applied to all the health professional schools, etc., outlined above. In addition, University Hospital-generated revenues are included in revenues reflected in Account No. 9280.

During the past four years, the Soft Drink Tax revenue and other local receipts have not risen with inflation, but essentially have been station-

TABLE 1
ALL SOURCES OF ACCOUNT 9280
AND PER CENT EACH IS OF THE TOTAL

	1979-80	% of Total	1980-81	% of Total	Budgeted 1981-82 [2]	% of Total	Projected 1982-83 [2]	% of Total
State Appropriated	16,827,910	28	17,571,087[1]	26	18,574,131[1]	26	19,574,289	27
Soft Drink Tax	7,196,958	12	7,295,610	11	7,400,000	10	7,400,000	10
Beginning Balance	3,238,221	5	4,569,786	7	4,965,474	7	1,518,982	2
Other	1,453,172	2	1,600,172	2	1,400,000	2	1,700,000	2
SUBTOTAL	28,716,261	47	31,036,655	46	32,339,605	45	30,193,271	41
University Hospital	31,625,636	53	35,732,138	54	40,000,000	55	42,650,000	59
TOTAL	60,341,897	100	66,768,793	100	72,339,605	100	72,843,271	100

[1]Adjusted to Governor's Freeze

[2]Based on revised estimate of May 5, 1982

ary. As indicated, University Hospital generates revenue sufficient to cover its direct costs, but cannot be expected to add to the educational program budget. Thus, the only tax-supported budget increments have come from the Legislative appropriation, Account No. 2850. (It should be noted that WVU Hospital revenues and costs exclude revenues and costs related to physician services.)

Table 1 shows an all-sources listing of Account No. 9280 and the per cent each category is of the total. Notice that the increases in the total amount are largely related to increasing WVU Hospital revenue. Also note the fluctuation in the beginning balance category.

Since 1978-79, the Legislature has provided only modest increases in the legislative appropriation. During this same period, minimum salary increases were mandated and salary increases, plus the financial impact of the general inflation rate, have exceeded substantially the Medical Center's tax revenue support. All budget categories—personal services, current expense, repairs and alteration, and equipment, have been affected. Table 2 compares the tax support of educational programs and shows the mandatory salary increments in comparison to the level of funding provided.

The failure of the Soft Drink Tax, the "other" category (tuition, investment income, etc.) and the beginning balance to rise with inflation, and the lack of state funding to make up for these losses along with the Governor's nearly $1 million reversion during 1981-82 have reduced seriously the beginning balance portion of the budget, resulting in substantially decreased funding for educational programs for 1982-83 and an anticipated negligible beginning balance and potential budget shortfalls for 1983-84. The Medical Center's asking budget for 1983-84 by necessity must seek major increases in state support of educational programs.

Furthermore, there are large capital fund needs for maintenance and repairs of the WVU Hospital, now 22 years old, and the Basic Sciences Building, now 25 years old. The hospital requires special attention and installation of new air conditioning, a sprinkler system, smoke barriers, etc., to bring it into compliance with life safety codes. No source of funds is currently available, nor has any funding source been identified to satisfy these needs.

The Figure shows the Higher Education Price Index-adjusted relationship for the combined Soft Drink Tax and the state appropriation, and indicates the overall decline in tax-based support expressed in 1971 dollars. The reduction in buying power is demonstrated.

The WVU School Of Medicine

The WVU School of Medicine began in 1902 as a two-year school. The first junior students began in 1960, and the first four-year M. D. graduates were in 1962. There are currently 88

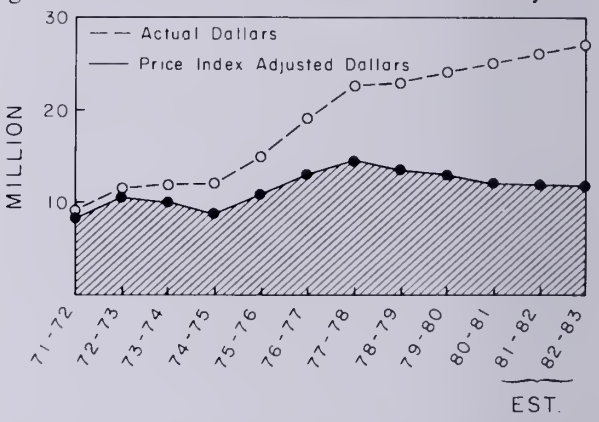

Figure. Comparison of Actual Tax Dollars in Account No. 9280 to Higher Education Price Index Adjusted Dollars.

TABLE 3

PERCENT OF SCHOOL OF MEDICINE FACULTY SALARY BY SOURCE, M.D. ONLY

	1979-80	1980-81	Estimated 1981-82	Budgeted as of 7/1/82 1982-83
State	50%	49%	45%	43%
Other	7%	8%	8%	7%
Medical Practice Plan	43%	43%	47%	50%

TABLE 4

WVU SCHOOL OF MEDICINE ALLOCATION FROM ACCOUNT 9280

	79-80	80-81	Estimated 81-82	Budgeted as of 7/1/82 82-83
School of Medicine Account 9280	13,604,705	15,985,617	17,366,097	16,456,953
Joint Appointees Other Schools*	176,946	252,106	279,384	283,932
Total	13,781,651	16,237,723	17,645,481	16,740,885
% of Total Acct 9280 Allocated to the School of Medicine	23%	24%	24	23%

*Dentistry, Pharmacy, Sociology, Psychology and Athletics

TABLE 2

COMPARISON OF MANDATORY SALARY INCREASES WITH JULY 1 LEVEL OF STATE FUNDING

Fiscal Year	State Appropriation	Soft Drink Tax	Total Tax Support	Change Over Prior Year	Required Salary Increase (%)
1979-80	16,827,910	7,235,064	24,062,974	4.5	7.0
1980-81	17,985,639	7,295,610	25,281,249	5.1	8.0
1981-82	19,551,716	7,400,000[1]	26,951,716	6.6	12.5
1982-83	19,574,289	7,400,000[1]	26,974,289	0.0	0.0

[1]Estimated

students admitted to each entering class. The School of Medicine also encompasses the basic medical sciences graduate programs (78 students); the physical therapy (36 students) and medical technology (36 students) programs; the Wheeling Division, and the medical education programs in the Charleston Division. As already has been indicated, the Family Practice Program, while funded by a separate line item in Account No. 9280, is included in the tables and in the discussion that follows. All units of the School of Medicine participate heavily in continuing education activities.

The School of Medicine has experienced a reduction in state funding. Table 3 demonstrates the declining support from the state for salaries of physician faculty members.

The reduction in the state salary base for physician faculty members is apparent, and is of concern. The slight decline in the "other" category in Table 3 is due to the weakening of extramural grant and contract funding, and related salary support. This phenomenon in turn is related to the continuing withdrawal of the federal government from the support of medical education and biomedical research.

It is obvious that the physician faculty members of the WVU School of Medicine have been required to earn an increasing portion of their salaries, as well as to generate funds for the overall support of the School of Medicine. The School of Medicine has generated research-grant funding in excess of $4.5 million for the past four years. However, the decline in federal research funding unquestionably is going to be felt by WVU and all medical schools in the future.

The School of Medicine allocated budget from Account No. 9280, the per cent of the total state funding going only to the School of Medicine for the last three years and the currently budgeted amount for 1982-83, are shown in Table 4. Considering all sources of revenue in Account No. 9280, the School of Medicine (all programs and divisions) accounts only for 23 per cent of the Medical School Fund. This again demonstrates how misleading the name "Medical School Fund" really is.

TABLE 5

WVU MEDICAL PRACTICE PLAN
INCOME & EXPENDITURES
ALL CASH BASIS

INCOME	1981/1982	1980/1981	1979/1980	1978/1979	1977/1978	1976/1977	1975/1976	1974/1975	1973/1974	1972/1973	1971/1972
NET RECEIPTS FROM SERVICE	$13,965,339	$11,659,199	$9,294,605	$8,151,088	$6,938,051	$6,642,924	$5,604,566	$4,224,391	$2,971,110	$2,842,086	$1,848,077
INVESTMENT & MISC. INCOME	836,556	538,365	336,144	205,666	165,667	129,392	90,283	30,090	44,111	9,611	15,369
TOTAL INCOME	$14,801,895	$12,197,564	$9,630,749	$8,356,754	$7,103,718	$6,772,316	$5,694,849	$4,254,481	$3,015,221	$2,851,697	$1,863,446
OPERATIONS EXPENSE											
SALARIES	$ 771,589	$ 696,581	$ 613,577	$ 529,376	$ 477,051	$ 445,091	$ 514,262	$ 226,173	$ 249,411	$ 184,369	$ 151,557
FRINGES	135,948	125,440	100,081	99,375	90,324	76,394	82,372	39,913	44,014	32,536	26,745
TOTAL SALARIES	$ 907,537	$ 822,021	$ 713,658	$ 628,751	$ 567,375	$ 521,485	$ 596,634	$ 266,086	$ 293,425	$ 216,905	$ 178,302
CURRENT EXPENSES *	$ 749,686	$ 721,984	$ 784,976	$ 735,497	$ 635,500	$ 600,422	$ 436,140	$ 376,987	$ 364,459	$ 222,332	$ 119,293
EQUIPMENT	$ 53,236	$ 153,412	$ 8,236	$ 2,100	$ 10,188	$ 2,517	$ 13,086	$ 14,400	$ 162	$ 2,397	$ - 0 -
OVERHEAD PAYMENTS TO WVU	$ 540,000	$ 360,000	$ 226,759	$ 106,759	$ 106,759	$ 100,000	$ 90,000	$ 90,000	$ 105,000	$ 75,000	$ 75,000
TOTAL OPERATIONS EXPENSE	$ 2,250,459	$ 2,057,417	$1,733,629	$1,473,107	$1,319,822	$1,224,424	$1,135,860	$ 747,473	$ 763,046	$ 516,634	$ 372,595
SCHOOL OF MEDICINE EXPENSE											
PHYSICIANS SALARY	$ 6,069,694	$ 4,546,002	$4,028,295	$3,306,348	$2,986,288	$2,456,243	$1,856,974	$1,769,103	$1,335,829	$1,084,904	$ 851,779
PHYSICIANS FRINGES	1,420,433	1,032,237	873,577	734,641	608,579	484,248	298,984	237,959	74,245	180,450	131,837
SUPPORT STAFF SALARY *	1,191,431	827,464	780,565	577,242	411,941	294,171	354,097	313,726	175,774	163,933	278,519
SUPPORT STAFF FRINGES *	177,081	128,321	108,316	87,890	62,655	41,361	- 0 -	- 0 -	- 0 -	- 0 -	- 0 -
TOTAL SALARIES	$ 8,858,639	$ 6,534,024	$5,790,753	$4,706,121	$4,069,463	$3,276,023	$2,510,055	$2,320,788	$1,585,848	$1,429,287	$1,262,135
CURRENT EXPENSE *	$ 1,728,093	$ 1,192,627	$1,107,545	$ 934,711	$ 948,863	$ 805,533	$ 500,302	$ 430,925	$ 449,078	$ 267,735	$ 134,507
EQUIPMENT *	$ 1,093,659	$ 515,503	$ 662,071	$ 482,800	$ 758,096	$ 488,198	$ 480,520	$ 535,119	$ 231,442	$ 150,819	$ 174,408
RENOVATIONS MEDICAL CENTER	$ 127,773	$ 19,270	$ 227	$ 72,882	$ 24,084	$ 293,176	$ 33,495	$ - 0 -	$ - 0 -	$ - 0 -	$ - 0 -
CONTRIBUTIONS *	$ 1,120,170	$ 340,999	$ 139,365	$ 77,195	$ 285,908	$ 213,760	$ 245,700	$ 50,000	$ 11,000	$ 12,000	$ - 0 -
TOTAL SCHOOL OF MEDICINE EXPENSES	$12,928,334	$ 8,602,423	$7,700,000	$6,273,709	$6,086,414	$5,076,690	$3,770,071	$3,336,833	$2,277,388	$1,859,841	$1,571,050
TOTAL EXPENSE	$15,178,793	$10,659,840	$9,433,629	$7,746,816	$7,406,236	$6,301,114	$4,905,931	$4,084,306	$3,040,434	$2,376,475	$1,943,645

FOOTNOTES

OPERATION EXPENSE

*CURRENT EXPENSES: Includes supplies, postage, data processing, building rent, telephones, utilities, rental and maintenance of office equipment, printing, etc.

SCHOOL OF MEDICINE EXPENSE

*SUPPORT STAFF SALARIES & FRINGES: Includes clerical, nurse clinicians, physicians assistants, research technologists, etc.

*CURRENT EXPENSE: Includes supplies, printing, travel and meetings, visiting professors, recruitment, books and subscriptions, rental and maintenance, agreements on equipment, etc.

*EQUIPMENT: Includes major purchase of equipment for patient care, teaching and research, etc.

*CONTRIBUTIONS: Includes institutional research fund, basic sciences support, emergency medical fund, Ambulatory Care Building, Alumni Association (for WVU Library), WVU House Staff Spouse Club, student loan fund, property gift to Medical School, etc. For FY 81-82: A major contribution was made to University Hospital to help fund a Coronary Care Unit.

WVU Medical Practice Plan

The WVU Medical Practice Plan is derived from professional fees the physician-teachers charge for services provided to patients at University Hospital and affiliated hospitals in Charleston and Wheeling. These are physician fees, not hospital fees.

The plan is managed by elected faculty physicians from clinical departments, and by the Dean of the Medical School. The Vice President for Health Sciences is an ex-officio member of the management body. Income and expenditures from the plan for the last decade are outlined in Table 5. All income becomes a restricted gift to the School of Medicine. It is evident that the faculty physicians over the years have generated and given several million dollars to the School of Medicine. The amount required for salary and fringe benefits of physician faculty has been rising steadily as state funds have declined. Even so, during the last decade the highest contribution for faculty physician salaries and fringe benefits (1981-82) was 53 per cent, leaving the remaining 47 per cent to support educational and research programs and meet overhead costs.

Examples of uses of practice plan funds for other than Educational/Research Program support include improvements in University Hospital for the benefits of patients; substantial contributions to the medical student loan fund; providing more than 160 student loans for which no other funds existed, and paying substantial amounts for physician uses of clinic space at University Hospital (this will be $750,000 for 1982-83).

Earlier this year, the Legislative Auditor questioned not having practice plan funds in a state account. We have been furnished an opinion by counsel that our current medical practice plan is in compliance with state law. Our response to the Auditor also discussed those matters which demonstrated the wisdom, in fact the necessity, that physicians' fees continue to be collected as they have for more than a decade.

Medical practice plans are based on the hiring of physicians to teach and to do research, not primarily to provide medical care to patients. Any additional salary must, of necessity, be earned by them or, as in most cases, it is not received. The medical practice plan thus provides a powerful incentive to faculty members to provide the highest quality patient care; to maintain the clientele of patients required for educational programs, and attract hospital patients who generate income to meet hospital budget requirements. Furthermore, faculty physicians view as an incentive their having a voice in the disposal of the funds they generate and donate to the School. Changing this arrangement would have to be considered a strong disincentive.

Of the 126 medical schools in the United States in 1980, 14 had no practice plan, and patient fees may have been paid directly to physicians or departments. The other 112 schools operate plans that, while varying somewhat from one to another, are quite similar and virtually are always managed by elected representatives of the faculty physicians who generate the money. In only two of the 112 U.S. medical schools is fee income "appropriated" to the school by the Legislature.

The WVU practice plan has been accountable. Physician salaries must be approved not only by the Department Chairmen and Dean, but also by the Vice President for Health Sciences, the President of the University and the Board of Regents. In the past two years, salaries also have had to be approved by the Commissioner of Finance and Administration. Legislative leadership regularly has been provided complete salary detail by source. The projected income of the corporation is built into the Medical School budget submitted annually to the Board and the Legislature. In addition, audits done by a major U.S. accounting firm annually have been provided to the Board and the Legislative Auditor. WVU is one of only nine medical schools in the United States that report to governing or legislative bodies.

A comparable plan is used by the WVU School of Dentistry to regulate and handle professional fees.

Conclusion

In conclusion, West Virginia University hopes that the Legislature will view the WVU Medical Practice Plan as a partnership between the Legislature and faculty physicians, aimed at maximizing the physicians' contribution to the School of Medicine and thereby reducing the level of tax support that would be required if the practice plan were destroyed. The similarity among 110 of 112 U.S. medical schools with practice plans; and the more than 11 years of responsible and accountable contributions by the WVU medical practice plan to programs dedicated to excellence in medical education, patient services and medical research, all benefiting the people of West Virginia are compelling arguments against the Legislative Auditor's recommendation.

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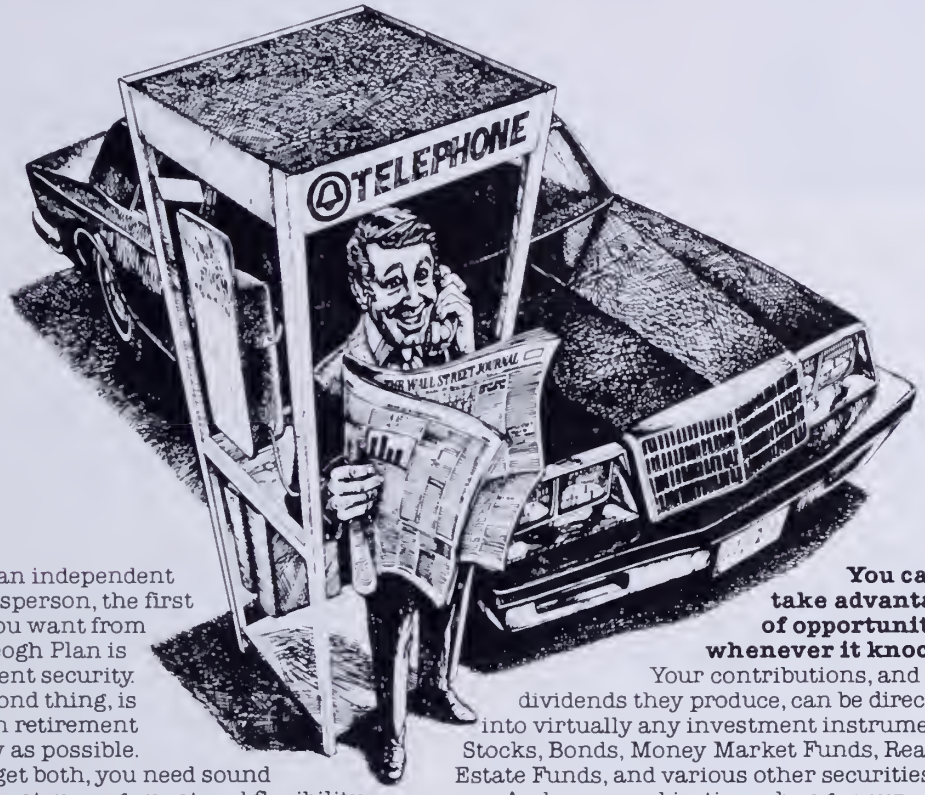

As an independent businessperson, the first thing you want from your Keogh Plan is retirement security. The second thing, is as much retirement security as possible.

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The 1982 Tax Act increased annual contribution limits to 20% of earned income up to $30,000 beginning in 1983. Coupled with the new $2,000 "Voluntary Deductible Contribution," you will be able to deduct and shelter as much as $32,000 per year.

Your contribution can be invested at your discretion, at ours, or both.

Of course, whether you direct your own investments, or we do it for you, they're managed within the guidelines of your risk and return objectives.

But as a smart businessperson, you know the importance of taking advantage of opportunities when they arrive. Our Keogh Plan makes that possible in several ways.

Your contributions go to work as soon as we get them.

You don't have to contribute on a regular basis—weekly, monthly, quarterly, etc. Whenever you send us a check, we put it to work immediately. Because we invest in, among other things, a variety of short-term Money Market Funds.

You can take advantage of opportunity, whenever it knocks.

Your contributions, and the dividends they produce, can be directed into virtually any investment instrument. Stocks, Bonds, Money Market Funds, Real Estate Funds, and various other securities.

And as your objectives change your Keogh Plan can react to reflect that change.

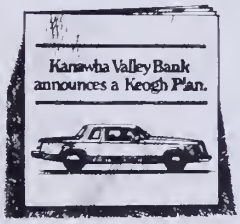
Our primary concern is your financial growth and security.

Sound management and flexibility are just the beginning of our Keogh Plan. We do the paperwork. We prepare all initial filings with the Department of Labor and Internal Revenue Service. Your Plan is set up with minimum effort on your part. And you can be certain it's complete and accurate with respect to legal and government regulations.

You also receive continual communications from us.

We'll send you regular mailings on investment performance. Information on current investment, money market and economic trends. Plus, updates on pension legislation.

And finally, your account will be part of our computerized allocation system that generates individual statements that show: beginning balances, detailed contribution records, distributions made, gains or losses for the year and year-end balances.



It's all part of a Keogh Plan structured with the options and opportunities you need for maximum retirement security.

Call (304) 348-7205 soon, to find out more.

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The President's Page

Guest Author
Linda (Mrs. Richard S.) Kerr, President
Auxiliary to the
West Virginia State Medical Association

A TRUE PARTNER

We do not just bake cookies and have tea parties. Some socializing is necessary — it's recreation and relaxation, and it's good for our mental health. But while we're chatting, we're also working on AMA-ERF, legislation, and health projects.

The American Medical Association Education and Research Foundation is supported nationwide by the Auxiliary. It is a tremendous effort to support medical education.

The Auxiliary is always willing and able to assist the medical profession with legislative activities — both on the national and state levels. We have an active Legislative Alert System to inform our members of actions they can pursue to let our representatives know the views of the medical community. We hope to work closely with the State Medical Association during the next year to see that the only legislation passed is that which is good for the medical profession and health care in general.

In West Virginia, we are spreading our national theme — "Make Good Health A Habit" — through blood pressure clinics and projects dealing with immunizations, nutrition, drug abuse, teen-age problems, problems of the elderly, and our "Shape Up for Life" campaign.

We are considering stress to be "the disease of the 80s," and are learning to identify problems in our own families and communities. A great concern to all of us is the quality of family life. Often the family that used to be the stress reducer now actually precipitates stress: 40 per cent of all marriages end in divorce, and 45 per cent of the children born today will live in a so-called broken home. Spouse abuse is only one example of the problems caused by frustrations and stress. We plan to gear new projects toward understanding stress management.

Another particular concern of mine is the family of the impaired physician. Our organization should be geared toward helping any physician and his family who are in trouble. When a doctor has any type of impairment problem, his family needs support. We hope to work well with the Association's Physician Services Committee and become a true partner in solving problems dealing with families of impaired physicians.

Harry Shannon, your President, has made us feel much appreciated. He realizes that the members of the Auxiliary are your strongest allies. I believe that we are your greatest "PR" asset. We have members with great abilities and talents. We are brought together by interests in the medical profession and the health needs of the public as well as the desire to cultivate friendly relations among physicians' families. If your spouse is not a member of the Auxiliary, encourage her (or him) to join — you'll both profit from the capital invested.

Linda

The West Virginia Medical Journal

Editorials

The Publication Committee is not responsible for the authenticity of opinion or statements made by authors or in communications submitted to this Journal for publication. The author shall be held entirely responsible. Editorials printed in The Journal do not necessarily reflect the official position of the West Virginia State Medical Association.

The financing of the West Virginia University School of Medicine is not "made simple," but it is certainly made much clearer by an article by Dr. John E. Jones in this issue of *The Journal*.

Unfortunately, part of the confusion which arises each year, especially in the press, may be the mislabelling of Account 9280 in the annual state budget act as the "West Virginia University — Medical School" fund.

MISNAMED FUND

The fund name was established in 1951 to receive building funds created by the soft drink legislation. Even at this early point, however, the intent of the money collected was to fund a modern medical center including a School of Dentistry (and Dental Hygiene), School of Nursing, School of Pharmacy and a University Hospital, along with the School of Medicine. The School of Medicine includes medical students as well as graduate trainees in the basic medical sciences and students in Medical Technology and Physical Therapy.

Not only has the source of funds in Account 9280 broadened drastically through the years, but so has the application of these funds.

In addition to the Soft Drink Tax, Account 9280 now includes receipts from the University Hospital, legislative appropriations from general tax revenue (Account 2850), and local receipts (tuition, investment income), as well as the balance forward from the previous budget year.

In addition to providing support for the University Hospital and the original Medical Center student programs, Account 9280 now provides funds for the Charleston and Wheeling Divisions of the West Virginia University Medical Center; and the Family Practice Program, as well as a "pass-through" line item to support community hospital residency and internship programs.

All of this represents laudable growth of the West Virginia University Medical Center.

Nevertheless, Account 9280 obviously is much more than the West Virginia Medical School Fund, and the misnaming of it hampers a clear understanding of legislative allocations at budget time.

In another 60 days or so, the West Virginia State Medical Association will be entering another calendar, program and administrative year. Also just ahead is another regular session of the West Virginia Legislature, with at least the usual number of new faces in House and Senate as a result of the November 2 general election.

INVOLVEMENT

Harry Shannon, M. D., of Parkersburg, already has set the theme for his general objectives during his year as Association President. He has called for new emphasis on, and attention to, communication "among ourselves, with our patients, with the media and the Legislature."

The Association can expect to end 1982 with a record membership of well over 2,000 doctors of medicine, including retired and honorary physicians who—in a number of instances—remain active on committees and in other roles.

Potentially, The Association is in the strongest position in its 115-year history to be a positive and extremely effective force in the promotion of public health, and as THE advocate for those needing health and medical care.

But a posture based on *potential* falls far short of the real need from the physician community in this day and time. There must, as Doctor Shannon has emphasized, be more direct and active involvement by the individual members of this Association.

Constant and increasing awareness of the world outside the office—what various other organizations and individuals are saying; what philoso-

phies, ideas and proposals are emerging in legislative and other circles; and how these things can impact, in a positive and often negative way, on the delivery of quality medical care—this is what must receive ever growing physician attention.

The Association's leadership and staff is under ever-growing pressure to keep abreast of all of the health care cost and other concerns of this era. No one on the firing line is objecting to that pressure. It's part of the responsibilities officers and staff assume.

But positive, and appropriate, response to such pressures and demand cannot come only from leadership and staff. The individual Association members are those who provide, day by day, the care sought and needed by their patients. Those individual physicians can measure better than anyone the impact and effect of governmental policies, and other factors, on their delivery of quality care. Those physicians see the patients; talk to and treat them, and acquire the primary awareness of their concerns.

All too often, legislative approaches—undertaken in the face of time and other limitations—at best are directed at symptoms, and not causes, of problems. Too frequently, there is insufficient or out-of-balance information at hand even to address the symptoms.

Some of these problems are not subject to immediate or easy solutions. But many can be approached in a much more effective fashion if the right kind of input and knowledge is at hand. In the general area of health and medical care, the chief reservoir for that kind of information is the practicing physician.

Because of stepped-up efforts toward effective legislative representation, many physicians have been contacted by Association staff and officers in recent years. But doctors don't need to await such contacts. In this day and time, there is activity aplenty on a constant basis. In large measure, the delivery of appropriate care is a day-by-day challenge.

Physicians must be increasingly aware of this, and not wait for a crisis to be called to their attention. They need to be actively involved, at the local and state levels, in this world in which we live. Hopefully, we'll see more of this — and Doctor Shannon's concerns about communication can be at least somewhat relieved.

Our Readers Speak

Dispensing Prescription Drugs

We are concerned that there may be some misunderstanding among those in the medical profession that prescription drugs dispensed by physicians are not subject to the child protection packaging standards of the Poison Prevention Packaging Act (PPPA).

The purpose of this letter is to correct any such impression by explaining the responsibility under the PPPA of physicians who dispense drugs. The Consumer Product Safety Commission's (CPSC) position regarding the applicability of the child protection packaging standards promulgated under the PPPA to dispensing physicians is summarized below for your convenience:

> Prescription drugs dispensed by physicians are subject to the child protection packaging standards of the Poison Prevention Packaging Act in the same manner as prescription drugs dispensed by pharmacists. Therefore, a physician is responsible under the law for dispensing prescription drugs in child-resistant packaging.
>
> The law does provide that non-child-resistant conventional packaging may be provided the consumer either at his request or at the direction of the prescribing physician. This does not, however, exempt drugs dispensed by physicians from the provisions of the law but rather allows the physician consciously to conclude within the spirit and intent of the non-complying package exemption provision that a particular patient, i.e., the elderly or handicapped, would be unable to gain access to the drug if dispensed in child-resistant packaging. The legislative history of this provision of the PPPA is clear in expressing the intent of Congress that *noncomplying packaging is to be the exception rather than the rule.*

In summary, the present law and the legislative history relating to the promulgation of the prescription drug regulation make it clear that dispensing physicians are subject to the PPPA and its requirements. The child protection packaging standards for aspirin and other substances have reduced childhood ingestions by as much as 60 per cent while prescription drug ingestions have been reduced by only approximately 22 per cent. Part of the reason for the relatively small reduction in childhood ingestions of prescription drugs may be confusion over the physician's responsibilities when dispensing prescription drugs. In addition, dispensing physicians can play a vital role in increasing consumer acceptance and use of child-resistant packaging by demonstrating its proper use and encouraging the consumer in the importance of its use in reducing childhood ingestions and deaths.

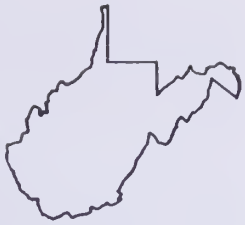
It is therefore important that physicians who dispense their own drugs clearly understand their responsibilities under the law. This is why we are soliciting your help in contacting your membership with this message.

We will be pleased to discuss the matter further or answer any questions you or your members may have.

Thank you in advance for your cooperation.

Leslie Y. Pounds
Regional Director
U. S. Consumer Product Safety Commission
Atlanta, Georgia 30308

GENERAL NEWS



Mid-Winter Conference Speakers Named

Hepatitis vaccines, herpes, prenatal diagnosis, and pediatric nephrology will be among discussion subjects for the 16th Mid-Winter Clinical Conference.

The annual continuing medical education program will be held in Charleston next January 21-23 at the new Marriott Hotel, located at 309 Lee Street, East.

Larry I. Lutwick, M. D.

Sponsors are the State Medical Association and the Marshall University and West Virginia University Schools of Medicine.

Scheduled for the opening session on Friday afternoon, January 21, are papers on "Vaccines in the Treatment of Hepatitis," by Larry I. Lutwick, M. D., of Brooklyn, New York, and "Herpes," by Jack M. Bernstein, M. D., of Huntington.

The Program Committee also announced that two of the speakers for the Saturday afternoon session will be Drs. R. Stephen Amato of Morgantown, on "New Developments in Prenatal Diagnosis," and Roberta Gray of Huntington, "Pediatric Nephrology."

Sessions also will be held Friday evening, Saturday morning and Sunday morning, with the conference ending at noon on Sunday.

Some 12 physicians are scheduled to speak, with other subjects to include joint replacement, sports medicine, trauma transport, genetics-immunodeficiency diseases, lens replacement, psychiatric drugs and antidepressants, and channel blockers.

"Quality Control in Medicine (Defense Against Malpractice)" will be the topic of discussion by a speaker to be announced, and by a panel, for the Friday evening physicians' session.

A public session on sports medicine will be held concurrently with the physicians' session Friday evening.

Speakers and topics previously announced include "Diagnostic Tests in Hepatitis"—Robert H. Waldman, M. D., WVU Professor of Medicine and Acting Dean, School of Medicine; "Joint Replacement"—J. David Blaha, WVU Assistant Professor of Orthopedic Surgery, and Chief, Section of Arthritis Surgery; and "Lens Replacement"—George W. Weinstein, M. D., WVU Professor and Chairman, Department of Ophthalmology.

Teaching, Other Positions

Doctor Lutwick currently is Associate Professor of Medicine at State University of New York, Downstate Medical School, New York-Brooklyn, and Associate Director, Department of Medicine, and Director, Division of Infectious Diseases, at Maimonides Medical Center in Brooklyn.

A native of Brooklyn, he was graduated from the Polytechnic Institute of Brooklyn, and received his M. D. degree in 1972 from the State University of New York, Downstate Medical School. He is certified in internal medicine and in the subspecialty of infectious diseases.

Doctor Lutwick has conducted considerable research on the hepatitis B virus, and currently is the recipient of two federal grants for studies in that area. He is the author or co-author of 23 articles, 13 abstracts, and chapters in three books (in press).

Jack M. Bernstein, M. D.

R. S. Amato, M. D., Ph.D.

Doctor Bernstein is MU Assistant Professor of Medicine, a post he has held since 1980. He was graduated from the State University of New York at Stony Brook, and received his M. D. degree in 1975 from Georgetown University.

He took his internship and residency at Henry Ford Hospital in Detroit, and completed a fellowship in infectious diseases at the University of Rochester in New York.

Holds Four Degrees

Doctor Amato is WVU Professor of Pediatrics and Medical Director of the WVU Affiliated Facility for the Developmentally Disabled. A native of Brooklyn, New York, he was graduated from Manhattan College in New York City and received his M. D. degree in 1973 from the University of Nebraska. He also holds an M. A. degree in psychology and science education (Columbia University, 1959) and a Ph.D. in human genetics and cytogenetics (New York University, 1968).

Since coming to WVU in 1976, Doctor Amato has served as Genetics Consultant for the Cleft Palate Clinic, Myelodysplasia Clinic, and Muscular Dystrophy Center.

Doctor Gray, MU Associate Professor of Pediatrics, came to MU in 1979 from Duke University Hospital, where she was attending pediatric nephrologist and attending pediatrician in the Pediatric Intensive Care Unit.

She is certified in pediatrics and in the subspecialty of pediatric nephrology.

Doctor Gray currently serves as Pediatric Nephrology Consultant for the Dialysis and Transplantation Program, U. S. Project HOPE, in Krakow, Poland.

M. D. from North Carolina

She received both her undergraduate and M. D. (1972) degrees from the University of North Carolina, and took her postgraduate training at the University of Kansas and Duke University.

The program meets the criteria for 14 hours of credit in Category 1 of the Physician's Recognition Award of the American Medical Association, and also is expected to be approved for Prescribed credit by the American Academy of Family Physicians.

A registration fee of $50 will be charged all registrants except nurses, medical students, interns and residents. For advance registration, make checks payable to West Virginia State Medical Association, and mail to the Association at P. O. Box 1031, Charleston 25324.

The Charleston Marriott is holding a block of rooms for conference attendees, and reservations should be made by January 3. Those who register for the conference in advance will receive from the Association a postage-paid Marriott reservation request card specifically designated for the conference. Persons making reservations directly with the hotel—in order to receive group rates—should specify that they will be attending the Mid-Winter Clinical Conference. Group rates are $48 for a single room and $54 for a double.

Members of the Program Committee are Drs. Joseph T. Skaggs, Chairman; William O. McMillan, Jr., and C. Carl Tully, all of Charleston; Richard G. Starr, Beckley; Maurice A. Mufson, Huntington, and Robert L. Smith, Morgantown.

The Program Committee is receiving continuing assistance from WVU Charleston Division staff members J. Zeb. Wright, Ph.D., Coordinator of Continuing Education, Department of Community Medicine; and Sharon A. Hall, Conference Coordinator.

Additional speakers and program details will be presented in the December and January issues of *The Journal*.

Review A Book

The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal*, Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication.

Current Obstetric and Gynecologic Diagnosis and Treatment, 4th Edition, edited by Ralph C. Benson, M. D. 1,038 pages. Price $25. Lange Medical Publications, Los Altos, California 94022. 1982.

Principles of Clinical Electrocardiography, 11th Edition, by Mervin J. Goldman, M. D. 437 pages. Price $15. Lange Medical Publications, Los Altos, California 94022. 1982.

Correlative Neuroanatomy and Fuctional Neurology, 18th Edition, by Joseph G. Chusid, M.D. 475 pages. Price $15. Lange Medical Publications, Los Altos, California 94022. 1982.

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1982 and 1983, as compiled by Dr. Robert L. Smith, Assistant Dean for Continuing Education, and J. Zeb Wright, Ph. D., Coordinator, Continuing Education, Department of Community Medicine, Charleston Division. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of The Journal.)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Morgantown, Charleston and Wheeling campuses. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, 3110 MacCorkle Avenue, S. E., Charleston 25304; Office of Continuing Medical Education, WVU Medical Center, Morgantown 26506; or Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

Nov. 5-6, Morgantown, Diagnostic Ultrasound Update

Nov. 5-6, Morgantown, Suspected Brain Damage: An Introduction to Early Intervention

Nov. 15, Charleston, A New Look at Alcoholism: Second Annual Conference, Medicine & Ministry in Cooperative Patient Care

Nov. 19-20, 3rd Annual Sports Medicine Symposium

Nov. 20, Morgantown, Sports Medicine Topics (Saturday morning football weekend session—Syracuse game; final day, 3rd Annual Sports Medicine Symposium)

Jan. 24-28, Snowshoe, Fourth Mid-Winter Cardiovascular Symposium

Regularly Scheduled Continuing Education Outreach Programs from WVU Medical Center/ Charleston Division

Buckhannon, St. Joseph's Hospital, first-floor cafeteria, 3rd Thursday, 7-9 P. M.—Nov. 18, "Quality Control/Medical Malpractice in WV" (a special program in cooperation with the WV State Medical Assn.), Carl R. Adkins, M. D.; Fred Bockstahler, J. D., and Tom Auman, M. Ed.

Dec.-Feb. (winter break).

Cabin Creek, Cabin Creek Medical Center, Dawes, 2nd Wednesday, 8-10 A. M.—Nov. 10, "Evaluation & Treatment of Depression," Sidney Lerfald, M. D.

Dec. 8, "Special Teenage Pregnancy Problems," Ward W. Maxson, M. D.

Gassaway, Braxton Co. Memorial Hospital, 1st Wednesday, 7-9 P.M.—Nov. 3, "Drug & Alcohol Abuse: Intervention Strategies," Thomas Haymond, M. D.

Dec. 1, "Common Intestinal Parasites in W. Va.: Diagnosis & Treatment," Kevin Tu, Ph.D.

Jan. 5, "Evaluation & Management of Thyroid Nodules," Richard Kleinmann, M. D.

Feb. 2, "Yes, Virginia, There Are Veneral Diseases in Rural Practices," Patrick Robinson, M. D.

Madison, 2nd floor, Lick Creek Social Services Bldg., 2nd Tuesday, 7-9 P. M.—Nov. 9, "Workup of Headache," A. L. Poffenbarger, M. D.

Dec. 14, "Evaluation of the Comatose Patient," Paul Derboven, M. D.

Oak Hill, Oak Hill High School (Oyler Exit, N 19) 4th Tuesday, 7-9 P. M.—Nov. 23, "Lower Back Injury" (a program in cooperation with the Workmen's Compensation Fund), Robert Ghiz, M. D.; Judy Greenwood, Ph. D., and John Farley.

Dec.-Feb. (winter break).

Welch, Stevens Clinic Hospital, 3rd Wednesday, 11 A. M.-1 P. M.—Nov. 17, "Quality Control/ Medical Malpractice in WV" (a special program in cooperation with the WV State Medical Assn.), Thomas Potterfield, M. D.; Fred Bockstahler, J. D., and Tom Auman, M. Ed.

Dec. 15, "Update on Non-Invasive Diagnosis & Management of Cardiovascular Diseases," Allen H. Schaeffer, M. D.

Jan.-Feb. (winter break).

Whitesville, Raleigh-Boone Medical Center, 4th Wednesday, 11 A. M.-1 P. M.—Nov.-Feb. (winter break).

Williamson, Appalachian Power Auditorium, 1st Thursday, 6:30-8:30 P. M.—Nov. 4, "Common Intestinal Parasites in West Virginia," Kevin Tu, Ph. D.

Dec. 2, "A Long-Term Management of the Diabetic," Stephen Grubb, M. D.

Committee Members Named By Doctor Shannon

Here is a list of the standing, special and ad hoc committees which have been named by Dr. Harry Shannon of Parkersburg, President of the West Virginia State Medical Association, to function during his one-year term of office.

Refer To This List!

Until the new 1983 State Medical Association Roster of Members (also containing committee appointments) is printed and distributed, Association members should retain this list for committee assignment reference purposes.

A list of all committee members has been provided each chairman as shown here. As the occasion arises for the scheduling of committee meetings, appropriate calls to all members will be sent from the Association headquarters in Charleston.

Aging

Pat A. Tuckwiller, Charleston, Chairman; M. K. Hasan, Beckley; Theodore P. Mantz, Charleston; Sam Milchin, Bluefield; Ralph H. Nestmann, Charleston; William J. Steger, Wheeling, and Lee B. Todd, Quinwood.

Cancer

Alvin L. Watne, Morgantown, Chairman; John J. Battaglino, Jr., Wheeling; James P. Carey, Huntington; Cordell A. de la Pena, Clarksburg; John C. Frich, Jr., Morgantown; David B. Gray, Charleston; John Battle Haslam, Charleston; Catalino B. Mendoza, Jr., Clarksburg; Hu C. Myers, Philippi; Nikunj Shah, Parkersburg; Shirley Willis Trammell, Charleston; John W. Trenton, Kingwood, and Carlos A. Vasquez, Wheeling.

Constitution and By-Laws

Stephen D. Ward, Wheeling, Chairman; Carl B. Hall, Charleston; Robert D. Hess, Clarksburg; J. C. Huffman, Buckhannon; John J. Mahood, Bluefield; John B. Markey, Charleston; Joseph B. Reed, Buckhannon; Joseph T. Skaggs, Charleston; Harry S. Weeks, Jr., Wheeling, and Roland J. Weisser, Jr., Morgantown.

Insurance

Jack Leckie, Huntington, Chairman; Lyle D. Vincent, Parkersburg, Vice Chairman; William R. Barton, Wheeling; James L. Bryant, Clarksburg; John T. Chambers, Charleston; Rodney D. Dean, South Charleston; L. Walter Fix, Martinsburg; H. Summers Harrison, Morgantown; James A. Heckman, Huntington; Edward Jackson, St. Albans; D. L. Latos, Wheeling; Kenneth G. MacDonald, Sr., Charleston; Worthy W. McKinney, Beckley; Joseph A. Smith, Dunbar, and C. Vincent Townsend, Martinsburg.

Interprofessional Relations

William E. Gilmore, Parkersburg, Chairman.

Sub-Committees

Medico-Legal: John F. I. Zeedick, Charleston, Chairman; Charles W. Merritt, Beckley; John F. Otto, Huntington, and William C. Revercomb, Jr., Charleston.

Medicine and Religion: Joe N. Jarrett, Oak Hill, Chairman; Marshall J. Carper, South Charleston; William L. Neal, Huntington, and Joseph T. Skaggs, Charleston.

Medicine and Pharmacy: L. Dale Simmons, Clarksburg, Chairman; Donald E. Cunningham, St. Albans; John L. Fullmer, Morgantown, and Donald S. Robinson, Huntington.

Medical-Dental Liaison: John A. B. Holt, Charleston, Chairman; Alberto G. Capinpin, Charleston; Gene Lee Hackleman, Huntington, and David A. Kappel, Wheeling.

Nurses Liaison: John B. Markey, Charleston, Chairman; Billie M. Atkinson, Parkersburg; Jean P. Cavender, Charleston; David L. Ealy, Moundsville; Ali H. Morad, Ripley; Joseph A. Smith, Dunbar, and Jack J. Stark, Belpre, Ohio.

Legislative

Frank J. Holroyd, Princeton, Co-Chairman; Stephen D. Ward, Wheeling, Co-Chairman; W. Alva Deardorff, South Charleston, Vice Chairman; Carl R. Adkins, Oak Hill; Billie M. Atkinson, Parkersburg; David F. Bell, Jr., Bluefield; R. Paul Bennett, Webster Springs; A. Paul Brooks, Parkersburg; James L. Bryant, Clarksburg; John T. Chambers, Charleston; John S. Cook, Welch; William D. Crigger, South Charleston; George A. Curry, Morgantown; Del Roy R. Davis, Kingwood; Vernon E. Duckwall, Elkins; James C. Durig, Wheeling; Roy A. Edwards, Jr., Huntington; T. Keith Edwards, Bluefield; A. C. Esposito, Huntington; N. B. Groves, Martinsburg; Robert F. Gustke, Parkersburg; Carl B. Hall, Charleston; Edward B. Headley, Delbarton; Robert D. Hess, Clarksburg; John A. B. Holt, Charleston; J. C. Huffman, Buckhannon; M. V. Kalaycioglu, Shinnston; Stanley J. Kandzari, Morgantown; Jack Leckie, Huntington; Michael

J. Lewis, St. Marys; Milton J. Lilly, Jr., Charleston; Robert W. McCoy, Jr., Keyser; Worthy W. McKinney, Beckley; James D. Martin, Morgantown; Charles W. Merritt, Beckley; Houston B. Moore, Lewisburg; Richard C. Rashid, South Charleston; William C. Revercomb, Jr., Charleston; Larry C. Rogers, Petersburg; Carl J. Roncaglione, South Charleston; Harry Shannon, Parkersburg; Robert G. Shirey, Lewisburg; Joseph T. Skaggs, Charleston; James T. Smith, Charleston; Stanard L. Swihart, Fairmont; Pat A. Tuckwiller, Charleston; Lyle D. Vincent, Parkersburg; Harry S. Weeks, Jr., Wheeling; Roland J. Weisser, Jr., Morgantown, and Moseley H. Winkler, Charleston.

Maternal and Perinatal Fetal Welfare

H. Alexander Wanger, Martinsburg, Chairman; Samuel J. Bracken, Wheeling; Larry D. Curnutte, Charleston; Robert D. Crooks, Parkersburg; T. Keith Edwards, Bluefield; Fernando G. Giustini, Wheeling; Barbara Jones, Morgantown; W. Gene Klingberg, Morgantown; George S. Kosar, Weirton; A. Robert Marks, Clarksburg; William A. Neal, Morgantown; Herbert H. Pomerance, Charleston; Thomas G. Potterfield, Lewisburg; Robert P. Pulliam, Beckley; F. H. Ross, Jr., Martinsburg, and George A. Shawkey, Charleston.

Sub-Committee on Perinatal Fetal Welfare

Barbara Jones, Chairman; Robert D. Crooks, A. Robert Marks, Thomas G. Potterfield, and George A. Shawkey.

Medical Aspects of Sports

K. Douglas Bowers, Jr., Morgantown, Chairman; Tony C. Majestro, Charleston, Vice Chairman; Colin M. Craythorne, Huntington; Clemente Diaz, Richwood; John P. Griffith, Jr., Wheeling; James S. Kessel, Ripley; Vincent J. Mazzella, Parkersburg; Chad L. Rolfe, Morgantown (Student Member); Carl J. Roncaglione, South Charleston; L. Dale Simmons, Clarksburg; William D. Strauch, Martinsburg; Richard M. Thompson, Beckley, and Robert R. Weiler, Wheeling.

Medical Economics

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World War I veteran Clarence Duvall is greeted above by Marshall University School of Medicine Dean Robert W. Coon, M. D., following ceremonies in September dedicating the School's new Medical Education Building and a new patient wing at the Huntington Veterans Administration Medical Center, and also honoring the VA's 50 years of service in the Huntington area. The new MU facilities and the VA Center share the same site.

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The 115th Annual Meeting of the State Medical Association was held August 26-28 at the Greenbrier in White Sulphur Springs. In the left photo, Dr. L. Walter Fix (right) of Martinsburg, 1981-82 Chairman of the Association's Council, presents the Past President's Plaque to Dr. John B. Markey, Charleston, retiring President, during the second and final session of the Association's House of Delegates at the Annual Meeting. On the right, Dr. Harry Shannon, Parkersburg, who was installed as new Association President during the second House session, is shown immediately following the session with his wife, Judy, and his parents, Mr. and Mrs. Harry L. Shannon, Jr., of Star City, Arkansas.

Shannon, Parkersburg; Stephen D. Ward, Wheeling, and Roland J. Weisser, Jr., Morgantown.

Other appointments include Harry S. Weeks, Jr., Wheeling, Parliamentarian; L. Dale Simmons, Clarksburg, 1983 Annual Meeting Golf Tournament; and Maurice A. Mufson, Huntington, 1983 Annual Meeting Tennis Tournament.

Congress Postpones Action On FTC Restrictions

The struggle in Congress (see editorial in the October issue of *The Journal*) over legislation to exempt medicine and other state-regulated professions from Federal Trade Commission jurisdiction apparently will be an item of business for the "lame duck" session scheduled to begin November 29.

The issue of FTC control has grown into a hotly debated national controversy, and this, in part, led lawmakers in both House and Senate to postpone final votes until after the November elections.

Also, Congress was engulfed in closing hours before an October 2 recess by other critical matters, including continuing resolutions to provide money to keep the government operating until mid-December, or until a number of still-pending appropriation bills can be considered for final action.

A key Senate test on the FTC dispute was won by the American Medical Association and others united to pare the FTC authority shortly before the pre-election recess.

The Senate Appropriations Committee approved 13-5 an amendment by Sen. James McClure, Republican of Idaho, that would prohibit the use of FTC funds in taking actions against state-regulated professions, with the ban to be in place for the fiscal year to end next September 30.

Senator McClure has been assured by the Senate leadership that the issue will be considered in the lame duck session. Meanwhile, still pending in the House is an amendment to an FTC re-authorization bill (the Luken-Lee Amendment) for a moratorium on FTC actions against state-regulated professions—and it likewise is expected to come up after November 29.

Cutting Corporate Health Costs Meeting Goal

The West Virginia Chamber of Commerce's first conference on strategies to contain rising corporate health care costs will be held on November 23 at the Sheraton Inn in Clarksburg.

Physicians are invited to attend the one-day meeting, entitled "Health Costs . . . Business Dilemma."

Speaking on "Health Care Problems—Government and Private Sector Initiatives" will be Robert B. Helms, Deputy Assistant Secretary for Planning and Evaluation/Health, U. S. Department of Health and Human Services, Washington, D. C.

James Heaton of Wheeling, President of Blue Cross-Blue Shield of Northern West Virginia, will talk on "Employee Health Plans—Benefits and Preventions."

Other speakers will be Robert M. Cunningham, Jr., of Chicago, health care journalist and lecturer, and Jan P. Ozga, Director, Clearinghouse on Business Coalitions, Chamber of Commerce of the United States, Washington, D. C.

There will be a registration fee of $75 for Chamber of Commerce members and $125 for non-members. Checks should be made payable to West Virginia Chamber of Commerce, and mailed to the Chamber at Box 2789, Charleston 25330.

Registration will be limited to 100.

Doctor Mufson, Co-Workers Write JAMA Article

Inoculation with a harmless pneumococcal disease vaccine could have prevented a significant number of deaths in the Huntington area, Marshall University School of Medicine Professor Maurice A. Mufson, M. D., and two co-workers reported in a recent issue (September 24) of the Journal of the American Medical Association.

In a four-year study of patients at the MU-affiliated Veterans Administration Medical Center, Cabell Huntington Hospital and St. Mary's Hospital, Doctor Mufson, Dr. Gretchen Oley and Dallas Hughey found that the rates of pneumococcal disease and deaths associated with it are similar to those found for more specialized populations. Bacteremic pneumococcal diseases studied included pneumonia, septicemia, meningitis, empyema and peritonitis.

Cardiovascular Symposium Set January 24-28, Snowshoe

A guest faculty of nine physicians will participate in the Fourth Mid-Winter Cardiovascular Symposium to be held January 24-28 at Snowshoe Ski Resort in Snowshoe.

The program, which has been expanded to five days, is sponsored by the American Heart Association, West Virginia Affiliate, with Charleston Area Medical Center and Charleston Division West Virginia University Medical Center as co-sponsors.

Faculty members will be Drs. George Beller, Director, Cardiology Division, University of Virginia; Robert O. Bonow, Senior Investigator, Cardiology Branch, National Institutes of Health, Bethesda, Maryland; James Chesebro, Mayo Clinic, Rochester, Minnesota; John Gallagher, Professor of Medicine, Duke University; Bruce Lytle, Department of Cardiac Surgery, Cleveland Clinic;

Randolph Martin, Director, Non-Invasive Laboratory, University of Virginia; Robert H. Peter, Professor of Medicine, Associate Director, Cardiovascular Lab, Duke University; Myron Weisfeldt, Director, Cardiology Division, Johns Hopkins University; and Thomas F. Whayne, Jr., Department of Cardiology, Lexington (Kentucky) Clinic.

Dr. William H. Carter of Charleston is Program Director.

Marshall To Provide CME For Rural Centers

The Marshall University School of Medicine will take continuing professional education to 15 rural National Health Service Corps centers in 13 counties under a new $17,108 contract from the NHSC.

Dr. Charles W. Jones, Director of the School's Office of Continuing Medical Education, said the on-site programs provide the best way to address the special problems of physicians and other rural health care providers.

"Rural physicians often feel isolated clinically, socially and geographically from the mainstream of medicine," he said. "They're especially limited in their opportunities for continuing education and interaction with specialists as they try to adapt to a new practice and a new community. With our on-site programs, we can work with physicians on the specific problems they face, as well as promote personal relationships with medical specialists that will last long after the program is finished."

In the Marshall program, Jones will visit each center to discuss its educational needs. He then will set up 15 half-day teaching sessions, preferably one at each site, to which NHSC professionals from all sites are invited. Jones said the university can meet non-medical as well as medical needs with its resources in such areas as computer use, office management and Appalachian culture.

The NHSC sites participating in the new program are Summersville Memorial Hospital, Camden-On-Gauley, Tug River Health Center in Gary, Monroe Health Service in Union, Delbarton Health Center, Little Huff Creek Health Center in Hanover, Fort Gay Primary Health Care Center, Cabin Creek Health Center in Dawes, Grant Medical Center in Milton, Valley Health Systems in Barboursville, Harts Health Center, Preston County Health Council in Kingwood, Love Memorial Clinic in Moorefield, East Hawse Health Center in Baker, and Clay-Battelle Health Center, Blacksville.

Marshall provided a similar program for 13 NHSC centers in 1980-81.

Regulations For Medicare, Medicaid Published

Recent weeks have seen the publication of hundreds of pages of regulations and proposals, as the U. S. Department of Health and Human Services worked to carry out regulatory orders from the Tax Equity and Fiscal Responsibility Act of 1982. The below-listed Medicare and

The Impaired Physician

Do you know of a physician struggling with a physical or other impairment? Do you believe that the Medical Association's Committee on Physician Services might be of assistance in such an instance? Please contact the Association's office, P. O. Box 1031, Charleston 25324, telephone 346-0551, for any information you desire or feel would be helpful.

Medicaid-related regulations were published in the *Federal Registers* of September 28 to October 1:

Establishing criteria for determining Medicare reimbursement for provider-based physicians. Allows physician reimbursement on a "reasonable cost basis," and sets tests of "reasonableness" for determining payments. (*October 1/Proposed Rule/30-day comment*) (The West Virginia State Medical Association has urged that the comment period be extended another 60 days.)

Limits on the "reasonable charges" of physicians furnishing care in hospital outpatient departments. (*October 1/Final Rule/60-day comment*)

Limits on Medicare reimbursement for physicians assisting at surgery. (*October 1/Final Rule/30-day comment*)

Extending the application of hospital cost limits to include ancillary services on a cost-per-discharge basis. (*September 30/Interim Final Rule/60-day comment*)

Amending regulations that set hospital reimbursable cost limits and exceptions to those regulations, and establishing the allowable rate of hospital cost increases. Limits will be applied on a per-discharge basis and adjusted to reflect hospital case-mix. (*September 30/Interim Final Rule/60-day comment*)

Altering Medicare routine inpatient service costs by disallowing the cost of private rooms unless such usage is medically necessary. (*September 28/Interim Final Rule/30-day comment*)

Adjusting the limits for reimbursement under Medicare for skilled nursing facility inpatient routine service costs and home health services, and establishing a single reimbursement rate for free-standing and hospital-based services. (*September 29/Final Notice/60-day comment*)

Establishing conditions whereby state Medicaid agencies may impose liens on real property owned by beneficiaries receiving care in nursing facilities. (*October 1/Final Rule/60-day comment*)

Establishing that Medicare not be responsible for costs related to Hill-Burton free care. (*October 1/Final Rule/60-day comment*)

Medical Meetings

Nov. 3—Spinal Cord Injury Seminar (Keystone Regional Spinal Cord Injury System), Pittsburgh.

Nov. 4-6—Am. Cancer Society, New York City.

Nov. 11-14—Med. Society of Va., Williamsburg.

Nov. 15-18—Am. Heart Assoc., Dallas.

Nov. 17-20—Am. Assoc. for Cancer Education Birmingham, Ala.

Nov. 18—Diabetes Update (Wheeling Hospital, Ohio Valley Medical Center), Wheeling.

Nov. 19-23—Gerontological Society of Am., Boston.

Nov. 23—Health Costs . . . Business Dilemma (WV Chamber of Commerce), Clarksburg.

Nov. 28-Dec. 3—Radiological Society of North Am., Chicago.

Dec. 2—Am. College of Chemosurgery, New Orleans.

Dec. 4-9 — Am. Academy of Dermatology, New Orleans.

Dec. 5-8 — Interim Meeting, AMA House, Miami Beach.

1983

Jan. 20-22—Neurosurgical Societies of the Virginias, Hot Springs, VA.

Jan. 21-23—16th Mid-Winter Clinical Conference, Charleston.

Jan. 29-Feb. 3—Am. College of Allergists, New Orleans.

Feb. 8-12—Am. College of Emergency Physicians, Surgery/Trauma, Detroit.

Feb. 18-20—Regional CME Meeting, Am. College of Physicians, Alexandria, VA.

March 20-24—Am. College of Cardiology, New Orleans.

April 15-17—WV Chapter, AAFP, Morgantown.

May 4-7—WV Chapter, Am. College of Surgeons, White Sulphur Springs.

May 8-12—Am. College of Obstetricians & Gynecologists, Atlanta.

June 19-23—Annual Meeting of AMA House, Chicago.

Aug. 25-27—116th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

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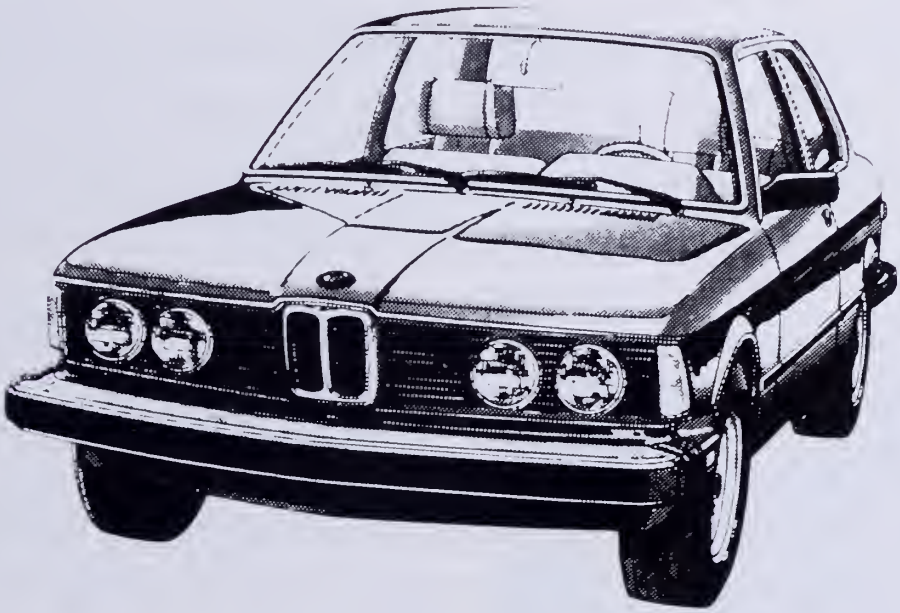

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WVU Medical Center
–News–

Compiled from material furnished by the Medical Center News Service, Morgantown, W. Va.

World's Third Oldest University Summer Teaching Site

A WVU physician spent a month in Poland this summer teaching some of the latest developments in American medicine at the world's third oldest university.

It was the second trip to Poland for Alexander V. Fakadej, M. D., under sponsorship of Project HOPE, organized 23 years ago to spread American medical expertise to other lands. The name stands for Health Opportunities to People Everywhere.

Doctor Fakadej, a pediatric neurologist, spent most of the month teaching, consulting, lecturing and seeing patients at the Institute of Pediatrics at the Medical Academy of the University of Cracow, founded in 1363 A. D. But he and other HOPE physicians also did site visits at hospitals in eastern Poland to assess their needs for basic medical material during the current crisis.

Two Gordon Gees, especially when one is President, create some confusion at WVU with mail and telephone calls occasionally misdirected. Gordon J. Gee (left), pronounced "Jee," shows a slide at a dual microscope to WVU President E. Gordon Gee, pronounced "Ghee." The first Gee is Supervisor of Biomedical Photography at the WVU Medical Center. Said President Gee to Supervisor Gee: "John Smith or Robert Jones I could understand, but Gordon Gee?"

"Projects HOPE is basically a teaching organization but, because of the dire need for equipment in parts of Poland, it has moved away from its teaching thrust for a short time and is offering relief aid," he said. Doctor Fakadej had these other comments about his trip:

—"I saw very little in the way of martial law. There were checkpoints outside the borders of each city but the soldiers simply stood there and waved me on. I had no difficulty in getting a pass for a canoeing trip on a river that borders Czechoslovakia."

—While soldiers were not much in evidence, martial law rules forbade all meetings, even lectures at the Academy of Medicine. "I was told that my four lectures were the first given since martial law took effect last December, and we had to bill them as 'consultations.' "

—Doctor Fakadej took with him to Poland assay material to test levels of anti-epileptic drugs in patients' blood. It was enough for about 350 assays of five different drugs "and it was the first time it was ever used in Poland so far as I could learn."

Doctor Andrews Gets Award

The West Virginia Public Health Association has presented its annual Public Health Merit Award to Charles E. Andrews, M. D., former Vice-President for Health Sciences at WVU.

Doctor Andrews was cited at the group's recent annual convention in Parkersburg for outstanding services in the cause of public health during his 13 years in charge of the WVU Medical Center, including University Hospital.

He resigned as Vice-President two years ago to return to full-time teaching, research and patient care in the Division of Pulmonary Diseases in the School of Medicine.

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Restricted Insanity Defense In Federal Cases Asked

The Reagan Administration has asked Congress to restrict sharply the insanity defense in federal cases.

The legislation sent to Capitol Hill by the Administration met a receptive audience. Many lawmakers have introduced bills on the insanity defense as a result of criticism of the verdict in the case of John Hinkley, Jr., for his assassination attempt on President Reagan.

The Administration proposal would limit insanity as a defense to cases where the defendant has no understanding of what he has done. In the words of Associate Attorney General Rudolph Giuliani, the defense would be applicable to "someone who had the mental age of a two-year-old or believed they were shooting at a tree when in fact they were shooting at a human being."

The controversy concerns the verdict of innocent by reason of insanity. The use of insanity as a mitigating factor in sentencing is not at issue. Many bills in Congress would restrict insanity to the "guilty but insane" defense.

In his message to Congress, President Reagan said the present rule "permits the introduction at trial of massive amounts of conflicting and irrelevant testimony by psychiatric experts, thereby complicating the trial process and deflecting the attention of the jury from the critical issues."

How Will Lame Duck Session Affect Health Measures?

An extraordinary "lame duck" session of Congress, to begin November 29, has been requested by President Reagan to force the lawmakers to approve separate appropriations bills to keep the government operating this fiscal year.

The alternate likely would have been passage of another continuing resolution, a combined package which would carry more spending than Reagan wants and which would have been difficult to veto.

From the standpoint of health legislation, the President's action could mean less money for some health programs at the Health and Human Services Department. The extra session also brightened chances for passage of health measures still pending before Congress.

These include the controversial reauthorization of the Federal Trade Commission and the efforts of the professions to remove the agency's jurisdiction over them.

The Health Planning program is up for reauthorization. The issue to be settled finally, in the Senate, is whether the program is to be killed outright or allowed to continue on a severely-reduced basis.

Planning Grants to States

A drastically-slashed health planning bill easily cleared the House, 302-14. The measure authorizes $65 million in grants over two years for states that want funds for their planning programs. Under the measure, states could use the federal money only for certificate-of-need review for institutional health services costing more than $1 million or requiring a capital expenditure of more than $5 million.

Exempt from any certificate-of-need review would be health maintenance organizations, free-standing physicians' offices, and equipment in independent clinical laboratories.

The Administration wanted to phase out planning this year, but the delay in submitting a pro-competition, de-regulation bill bolstered arguments of pro-planners that the program should stay alive.

The bill passed by the House was a compromise worked out between Reps. Henry Waxman, Democrat of California, and Edward Madigan, Republican of Illinois, the top members of the House Commerce Subcommittee on Health.

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Psychiatric treatment for the emotionally disturbed children ages 5 to 13 now available in new children's pavilion. Separation maintained from adult psychiatric care unit. Each program offers:

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Obituaries

DONALD N. BALL, M. D.

Dr. Donald N. Ball of Princeton died on August 23 at his home there. He was 68.

Doctor Ball, who was born in Northumberland County, Pennsylvania, specialized in the eye, ear, nose and throat. He had practiced in Princeton for 25 years, having been located previously in Welch and Norfolk, Virginia.

He was graduated from Harvard University, received his M. D. degree in 1936 from Cornell University, and took his internship and residency at Bellevue Hospital in New York City.

Doctor Ball was certified in otolaryngology in 1943; ophthalmology, 1952.

He served in the U. S. Army Medical Corps during World War II, and was a member of the Mercer County Medical Society, West Virginia State Medical Association, American Medical Association, and West Virginia Academy of Ophthalmology and Otolaryngology.

Surviving are four daughters, Patsy Vreeland of Porterville, California; Jean Currin and Ellie Ball, both of New York City, and Penny Boyter of Columbia, Maryland.

* * *

OLIN C. GLASS, M. D.

Dr. Olin C. Glass of Sissonville, a family physician, died on September 16 in a Charleston hospital. He was 63.

A lifelong resident of Sissonville and physician there for 29 years, he was the football team physician at the Sissonville Junior and Senior high schools for 24 years.

Doctor Glass received an A. B. degree in 1942 from West Virginia University, an M. S. degree in 1946 from Ohio State University, and his M. D. degree in 1952 from the University of Louisville.

He was a member of the Kanawha Medical Society, West Virginia State Medical Association and American Medical Association.

Survivors include the widow; a daughter, Pamela Glass of Christiansburg, Virginia; a son, Gregory Glass of Huntington; a sister, Mrs. Gwyndolia Bock of Charleston, and a brother, Dr. William J. Glass, Jr., of Monett, Missouri.

E. HUNTER BOGGS, M. D.

Dr. E. Hunter Boggs of Charleston, a retired dermatologist, died on September 22 at his home. He was 71.

A Navy veteran of World War II, he also had practiced in Chester and Hinton.

Doctor Boggs received his M. D. degree in 1937 from Northwestern University.

He was a member of the American Academy of Dermatology, and an honorary member of the Kanawha Medical Society, West Virginia State Medical Association and American Medical Association.

Survivors include the widow; two sons, John Hunter Boggs of Houston, Texas; a stepson, Col. Charles F. Stebbins of Alexandria, Virginia; a daughter, Mrs. Janet Stout of Greensboro, North Carolina, and a stepdaughter, Mrs. Stan Chase of Paducah, Kentucky.

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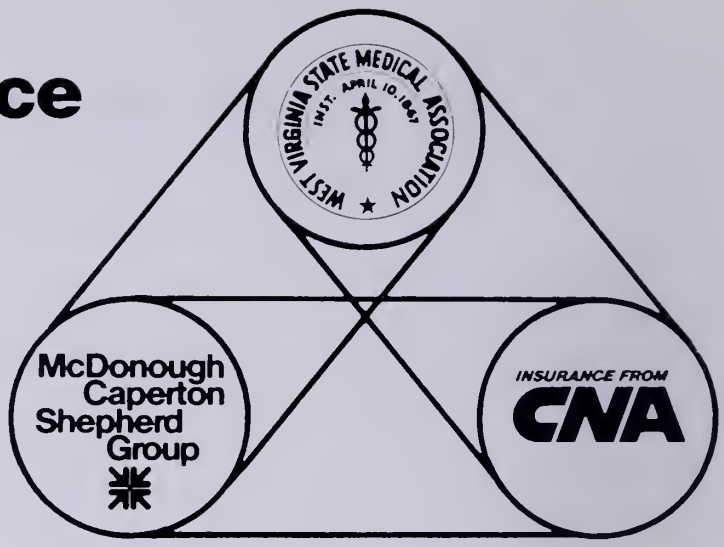

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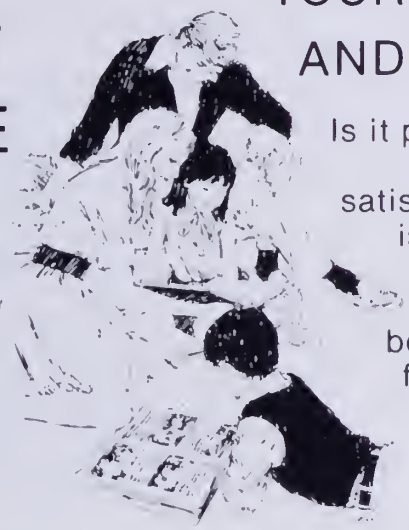

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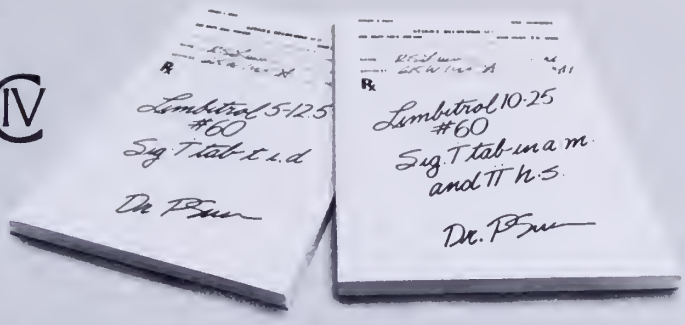

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References: 1. Clagham J: *Psychosomatics 11*:438-441, Sept-Oct 1970. **2.** Rickels K: Drug treatment of anxiety, in *Psychopharmacology in the Practice of Medicine*, edited by Jarvik ME. New York, Appleton-Century-Crofts, 1977, p. 316 **3.** Baldessarini RJ, Tarsy D: Tardive dyskinesia, in *Psychopharmacology: A Generation of Progress*, edited by Lipton MA, DiMascio A, Killam KF. New York, Raven Press, 1978, p. 999

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Indications: Relief of moderate to severe depression associated with moderate to severe anxiety.
Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use; then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.
Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients. (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).
***Usage in Pregnancy:* Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**
Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage, withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline; symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).
Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. Concomitant use with other psychotropic drugs has not been evaluated. sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.
Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.
The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs:
Cardiovascular. Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.
Psychiatric. Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.
Neurologic. Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.
Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.
Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.
Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.
Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.
Endocrine. Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female and elevation and lowering of blood sugar levels.
Other. Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.
Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. I.V. administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.
Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single *h.s.* dose may suffice for some patients. Lower dosages are recommended for the elderly. Limbitrol 10-25, initial dosage of three to four tablets daily in divided doses, increased to six tablets or decreased to two tablets daily as required. Limbitrol 5-12.5, initial dosage of three to four tablets daily in divided doses, for patients who do not tolerate higher doses.
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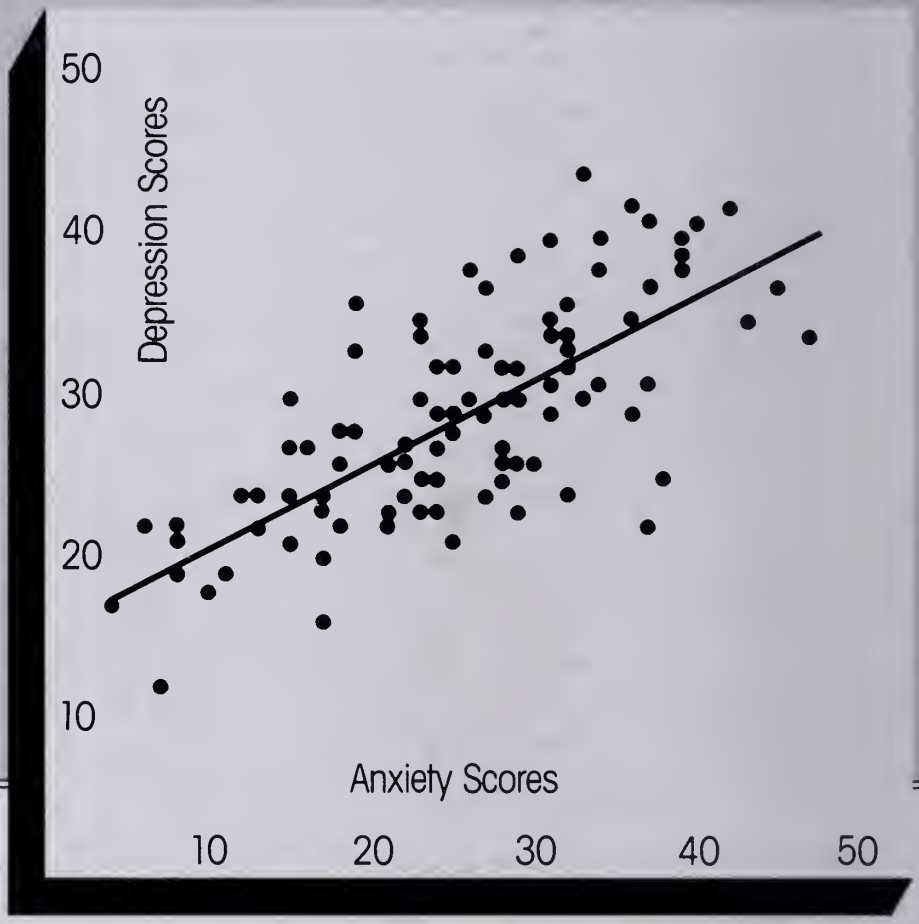

The graph illustrates the close correlation between depression and anxiety derived through the MMPI and the Taylor Manifest Anxiety Scale in 100 nonpsychotic psychiatric patients. The Coefficient of Correlation is 0.7. As depression increased, so did the anxiety levels.
—Adapted from Claghorn J[1]

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1. Claghorn J: *Psychosomatics 11*:438-441, Sept-Oct 1970

Please see summary of product information on inside cover.

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The West Virginia Medical Journal

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Review Article: 'Corneal Blindness Is Curable,' Page 305

16th Mid-Winter Clinical Conference
January 21-23, 1983

Volume 78 Number 12
December 1982

An added complication... in the treatment of bacterial bronchitis*

Brief Summary.
Consult the package literature for prescribing information.

Indications and Usage: Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae*, and *S pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS TO BOTH DRUG CLASSES (INCLUDING ANAPHYLAXIS AFTER PARENTERAL USE)

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs

Precautions: If an allergic reaction to cefaclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e g , pressor amines, antihistamines, or corticosteroids

Prolonged use of cefaclor may result in the overgrowth of nonsusceptible organisms Careful observation of the patient is essential If superinfection occurs during therapy, appropriate measures should be taken

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs test may be due to the drug

Ceclor should be administered with caution in the presence of markedly impaired renal function Under such a condition, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly)

Usage in Pregnancy— Although no teratogenic or antifertility effects were seen in reproduction studies in mice and rats receiving up to 12 times the maximum human dose or in ferrets given three times the maximum human dose, the safety of this drug for use in human pregnancy has not been established The benefits of the drug in pregnant women should be weighed against a possible risk to the fetus

Usage in Infancy—Safety of this product for use in infants less than one month of age has not been established

Adverse Reactions: Adverse effects considered related to cefaclor therapy are uncommon and are listed below

Gastrointestinal symptoms occur in about 2 5 percent of patients and include diarrhea (1 in 70) and nausea and vomiting (1 in 90)

Hypersensitivity reactions have been reported in about 1 5 percent of patients and include morbiliform eruptions (1 in 100) Pruritus, urticaria, and positive Coombs tests each occur in less than 1 in 200 patients

Cases of serum-sickness-like reactions, including the above skin manifestations, fever, and arthralgia/arthritis, have been reported Anaphylaxis has also been reported

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician

Hepatic—Slight elevations in SGDT, SGPT, or alkaline phosphatase values (1 in 40)

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40)

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200) [103080R]

*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S pneumoniae* or *H influenzae* *

Note Ceclor® (cefaclor) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever See prescribing information

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1 Antimicrob Agents Chemother , *8* 91, 1975
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7 Data on file, Eli Lilly and Company
8 Principles and Practice of Infectious Diseases (edited by G L Mandell, R G Douglas, Jr , and J E Bennett), p 487 New York John Wiley & Sons, 1979

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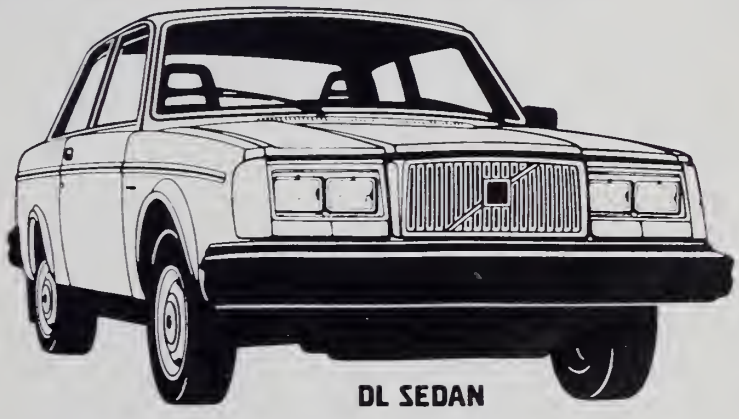

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Warnings

Usage in Pregnancy Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions

Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions

The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration

Children and Adults Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

References 1. Pitts NE, Migliardi JR: *Clinical Pediatrics* 13:87, 1974. **2.** Modell W: *Drugs of Choice* 1980-1981. C. V. Mosby Co., St. Louis, 1980, p. 362. **3.** Goodman LS, Gilman A: *The Pharmacologic Basis of Therapeutics*, 6th edition, MacMillan Publishing Co., Inc., New York, 1980, p. 1032.

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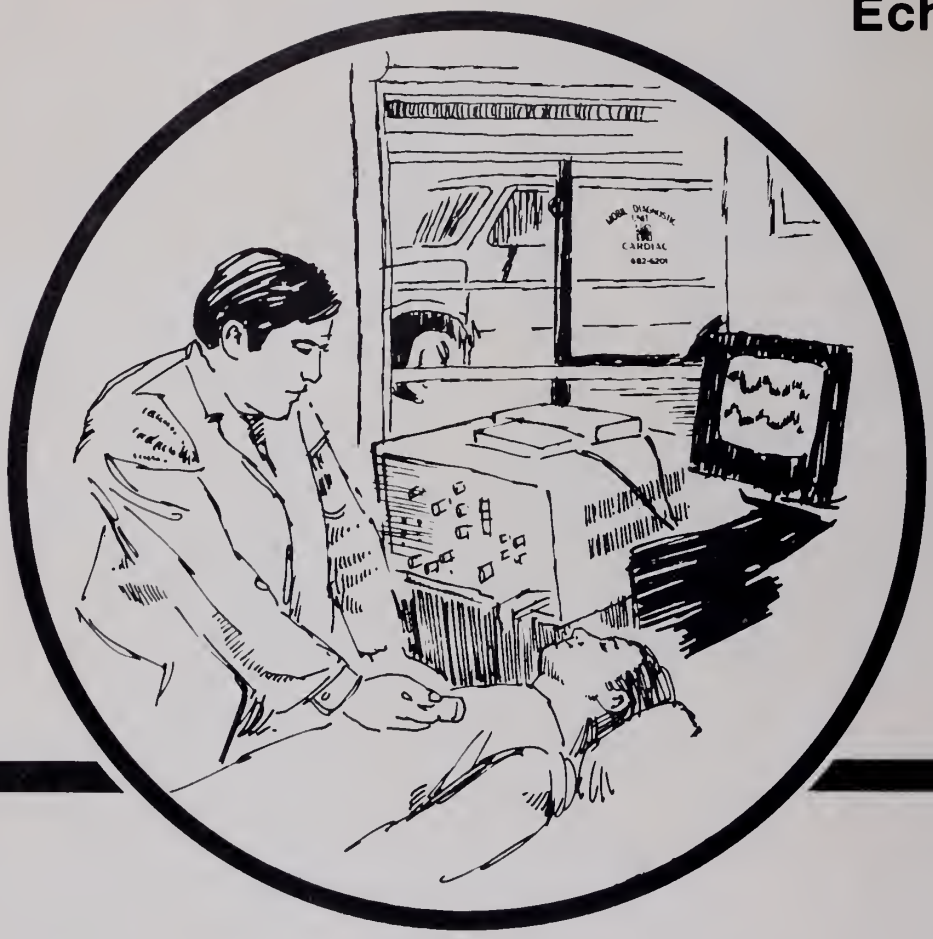

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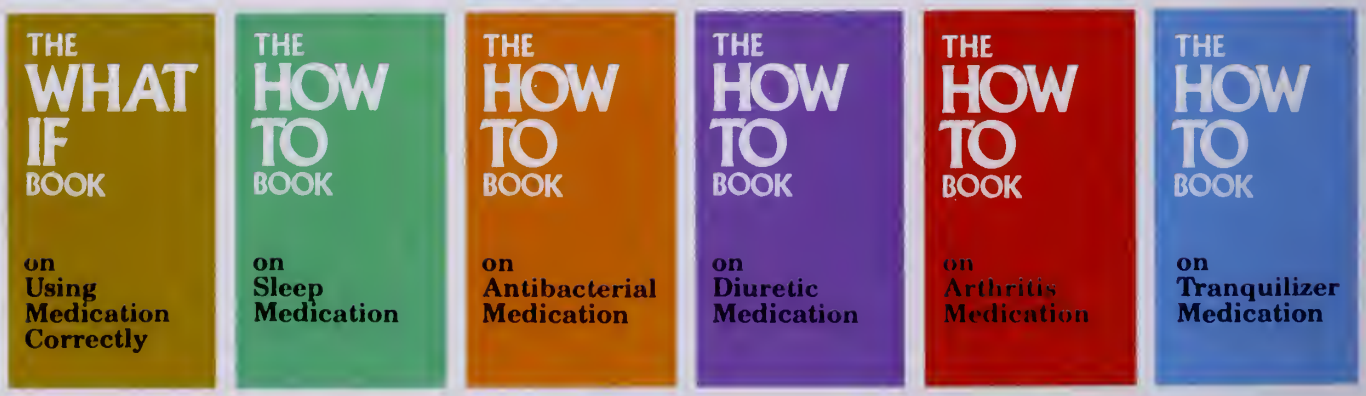

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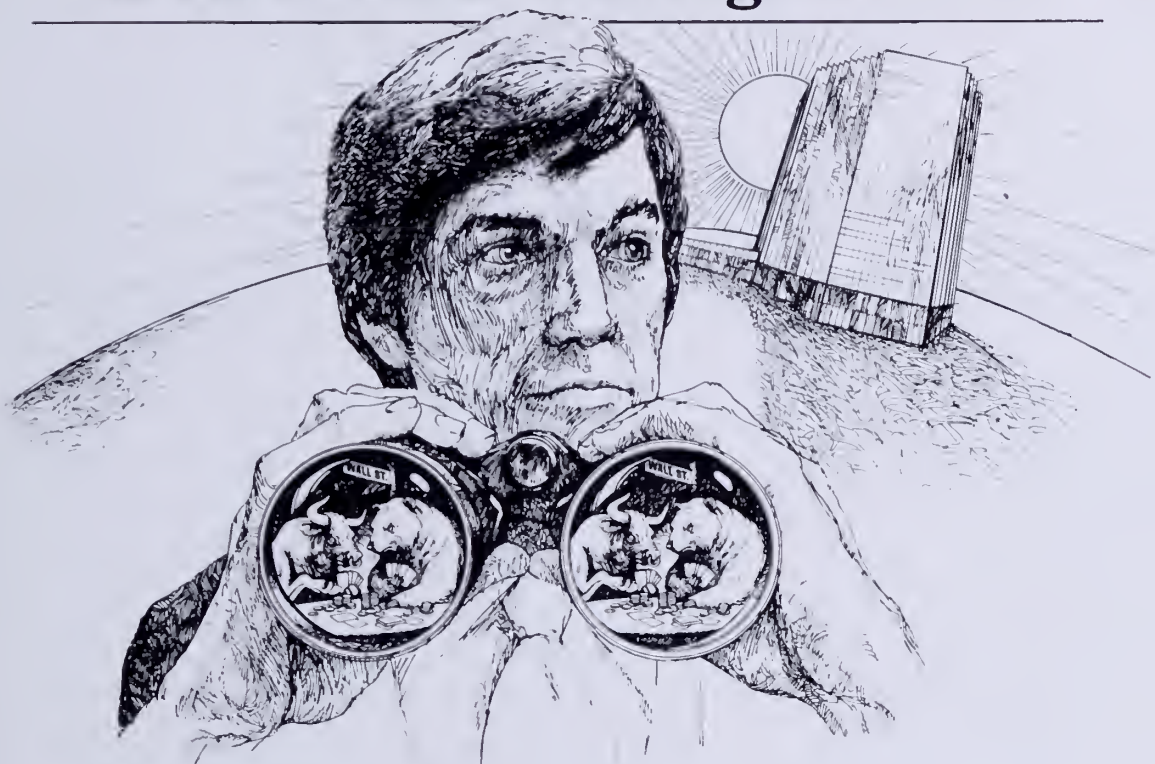

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Each fluid ounce contains: Codeine Phosphate 65.8 mg • (WARNING: MAY BE HABIT FORMING) Phenylephrine Hydrochloride 30 mg • Phenylpropanolamine Hydrochloride 20 mg • Pheniramine Maleate 20 mg • Pyrilamine Maleate 20 mg • Ammonium Chloride 200 mg • Alcohol 5%

Symptomatic Relief of Coughing with Nasal and Bronchial Decongestion

Full range symptom-reliever for patients with air way congestion in the upper chest as well as the nose and throat.

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TABLETS EXPECTORANT

RU-TUSS®

Tablets

DESCRIPTION

Each prolonged action tablet contains:

Phenylephrine Hydrochloride	25 mg
Phenylpropanolamine Hydrochloride	50 mg
Chlorpheniramine Maleate	8 mg
Hyoscyamine Sulfate	0.19 mg
Atropine Sulfate	0.04 mg
Scopolamine Hydrobromide	0.01 mg

Ru-Tuss Tablets act continuously for 10 to 12 hours.

Ru-Tuss Tablets are an oral antihistaminic, nasal decongestant and anti-secretory preparation

INDICATIONS AND USAGE Ru-Tuss Tablets provide relief of the symptoms resulting from irritation of sinus, nasal and upper respiratory tract tissues Phenylephrine and phenylpropanolamine combine to exert a vasoconstrictive and decongestive action while chlorpheniramine maleate decreases the symptoms of watering eyes, post nasal drip and sneezing which may be associated with an allergic-like response The belladonna alkaloids, hyoscyamine, atropine and scopolamine further augment the anti-secretory activity of Ru-Tuss Tablets

CONTRAINDICATIONS Hypersensitivity to antihistamines or sympathomimetics Ru-Tuss Tablets are contraindicated in children under 12 years of age and in patients with glaucoma, bronchial asthma and women who are pregnant Concomitant use of MAO inhibitors is contraindicated

WARNINGS Ru-Tuss Tablets may cause drowsiness. Patients should be warned of the possible additive effects caused by taking antihistamines with alcohol, hypnotics, sedatives or tranquilizers

PRECAUTIONS Ru-Tuss Tablets contain belladonna alkaloids, and must be administered with care to those patients with glaucoma, or urinary bladder neck obstruction. Caution should be exercised when Ru-Tuss Tablets are given to patients with hypertension, cardiac or peripheral vascular disease or hyperthyroidism. Patients should avoid driving a motor vehicle or operating dangerous machinery (See Warnings).

OVERDOSAGE Since the action of sustained release products may continue for as long as 12 hours, treatment of overdoses directed at reversing the effects of the drug and supporting the patient should be maintained for at least that length of time. Saline cathartics are useful for hastening evacuation of unreleased medication. In children and infants, antihistamine overdosage may produce convulsions and death.

ADVERSE REACTIONS Hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis, and thrombocytopenia may occur. Other adverse reactions to Ru-Tuss Tablets may be drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, tachycardia, hypotension/hypertension, faintness, dizziness, tinnitus, headache, incoordination, visual disturbances, mydriasis, xerotomia, blurred vision, anorexia, nausea, vomiting, diarrhea, constipation, epigastric distress, hyperirritability, nervousness, dizziness and insomnia Large overdoses may cause tachypnea, delirium, fever, stupor, coma and respiratory failure

DOSAGE AND ADMINISTRATION Adults and children over 12 years of age, one tablet morning and evening Not recommended for children under 12 years of age Tablets are to be swallowed whole

HOW SUPPLIED:

Bottles of 100 Tablets	NDC 0524-0058-01
Bottles of 500 Tablets	NDC 0524-0058-05

Federal law prohibits dispensing without prescription

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RU-TUSS®

Expectorant

DESCRIPTION

Each fluid ounce of Ru-Tuss Expectorant contains:

Codeine Phosphate	65.8 mg
(WARNING: MAY BE HABIT FORMING)	
Phenylephrine Hydrochloride	30 mg
Phenylpropanolamine Hydrochloride	20 mg
Pheniramine Maleate	20 mg
Pyrilamine Maleate	20 mg
Ammonium Chloride	200 mg
Alcohol	5%

Ru-Tuss Expectorant is an oral antifussive, antihistaminic, nasal decongestant and expectorant preparation.

INDICATIONS AND USAGE Ru-Tuss Expectorant is indicated for symptomatic relief of upper respiratory congestion associated with pharyngitis, tracheitis, bronchitis, and allergic rhinitis Also, for the temporary relief of symptoms associated with hay fever, allergies, nasal congestion and cough due to the common cold.

CONTRAINDICATIONS Hypersensitivity to antihistamines. Concomitant use of an antihypertensive or antidepressant drug containing a monoamine oxidase inhibitor is contraindicated

Ru-Tuss Expectorant is contraindicated in patients with glaucoma, bronchial asthma and in women who are pregnant.

WARNINGS Ru-Tuss Expectorant contains codeine phosphate, therefore, the patient should be warned of the potential that this drug may be habit forming Ru-Tuss Expectorant may cause drowsiness. Patients should be warned of the possible additive effect caused by taking antihistamines with alcohol, hypnotics, sedatives and tranquilizers.

PRECAUTIONS Patients taking Ru-Tuss Expectorant should avoid driving a motor vehicle or operating dangerous machinery (See Warnings). Caution should be taken with patients having hypertension, diabetes, hyperthyroidism and cardiovascular disease.

Caution should also be used in patients with pulmonary, hepatic or renal insufficiency

ADVERSE REACTIONS Ru-Tuss Expectorant may cause drowsiness, lassitude, giddiness, dryness of mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, tachycardia, hypotension/hypertension, faintness, dizziness, tinnitus, headache, incoordination, visual disturbances, mydriasis, xerostomia, blurred vision, anorexia, nausea, vomiting, diarrhea, constipation, epigastric distress, hyperirritability, nervousness, and insomnia Overdoses may cause restlessness, excitation, delirium, tremors, euphoria, metabolic acidosis, stupor, tachycardia and even convulsions.

DOSAGE AND ADMINISTRATION Adults: 1 or 2 teaspoonfuls, orally, every 4 hours, not to exceed 10 teaspoonfuls in any 24-hour period.

Children 6 to 12 years of age: ½ the adult dose, not to exceed 6 teaspoonfuls in any 24-hour period Children 2 to 6 years of age: ½ teaspoonful every 4 hours, not no exceed 3 teaspoonfuls in any 24-hour period Children under 2 years of age: Use as directed by a physician.

HOW SUPPLIED: (16 fl. oz.)

Pint Bottles	NDC 0524-1010-16

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Review Article

Corneal Blindness Is Curable

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The process of corneal transplantation has been perfected to the point where postoperative complications and rejection rates are lower than for any other homologous organ transplants.

In West Virginia more than 100 corneal transplants are performed yearly. However, at least 50 to 100 more transplants would be performed if donor corneas were readily available. Waiting periods can be extremely long (three to nine months), and would be shortened considerably if corneas were easier to obtain in West Virginia as they are in those other states which have enacted legislation permitting access to corneas of all recently deceased cases coming under the aegis of the medical examiner.

Corneal blindness is most often curable.

"SPECK in cornea . . . 50¢." The foregoing, according to Dr. Harvey Cushing,[1] is the first fee as a practicing physician in the account book of Sir William Osler, M. D. Also, according to Cushing, Doctor Osler pointed out this entry to "aspiring young M. D.'s in later years with a twinkle in his eye."

The eye is an organ of great structural and functional complexity, and is subject to a correspondingly large number of diseases. Loss of corneal transparency is one of the leading causes of blindness in the world today.

The transparent cornea is a circular piece of avascular tissue, measuring about 11.5 mm. in diameter and less than one millimeter in thickness. It forms the anterior portion of the eye, covering the colored iris much like the crystal of a timepiece. The cornea is the first and most powerful lens of the eye's optical system. Production of a sharp image at the retinal receptors requires that the cornea be completely transparent and that it be of appropriate refractive power.

When the cornea becomes diseased through inflammation (keratitis), trauma, or degeneration, opacities interfering with normal vision inevitably result.

The literature suggests various techniques for repairing the opaque cornea, or leukoma. In 1775, Robert Mead[2] recommended the use of equal parts of powdered glass and sugar levigated into an impalpable powder. "A little put into the eye every day," he writes, "gradually absterges and wears off the spot by its inciting quality." Darwin,[3] in 1803, suggested surgical excision of the opacity, trusting that the resultant scar would heal without losing its transparency.

It was not until 1835 that the first successful homologous corneal transplant was performed.[4,5] This was done on a gazelle. For the remainder of the nineteenth century numerous unsuccessful attempts were made at heterologous corneal transplants (i.e., from lower animals to man). In 1906, Zirm[6] successfully transplanted a

human cornea from an 11-year-old to a 45-year-old. This experience led Zirm to conclude that for successful keratoplasty only human corneas should be considered.

Today corneal transplantation is the most successful of all organ transplants. Although corneas have been transplanted on a relatively large scale since the 1930s, their success rate has soared with major advances occurring in the 1960s. The success of this operation is directely attributable to the increased knowledge gained regarding the physiology of the normal cornea, a better understanding of graft failure, improved donor material, attendant preservation techniques and better surgical techniques, suture material, and instrumentation.[7]

Prevalence of Corneal Blindness

In 1979, 11,226 corneal transplants were performed in the United States.[8] Though the conditions requiring corneal transplantation vary, the common indications are keratoconus (conical cornea) (Figure 1), herpes simplex keratitis (Figures 2,3), traumatic corneal scar, corneal dystrophies (e.g., Fuchs' dystrophy), aphakic bullous keratopathy (Figures 4,5), interstitial keratitis, active or chronic inflammations of bacterial or fungal etiology, chemical burns (Figure 6), congenital corneal opacities, and corneal degenerations (Table 1).

The Operation: Usually performed under local anesthesia, the operation requires a microscope, delicate instrumentation, fine synthetic sutures, a fine surgical needle, and an array of ancillary surgical equipment. A corneal trephine is used to punch out a central corneal button in the discased cornea. A similar trephine is used to cut out a donor corneal button which is then placed in the recipient hole which has been

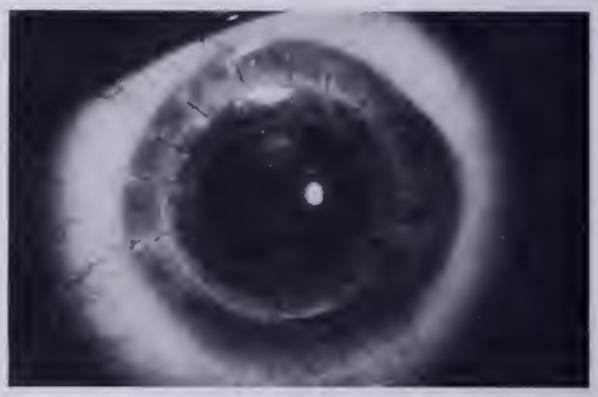

Figure 3. Postoperative, same eye as in Figure 2.

Figure 1. Keratoconus (conical cornea).

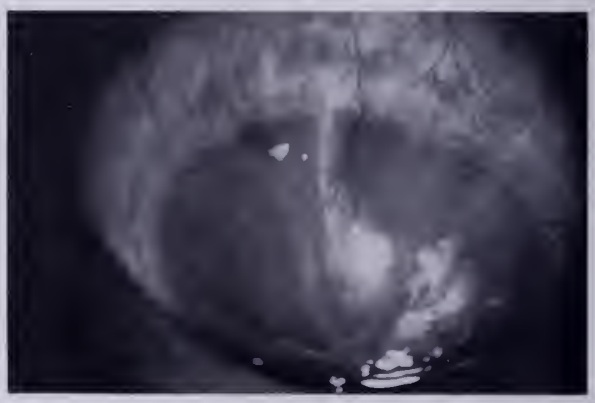

Figure 4. Aphakic bullous keratopathy.

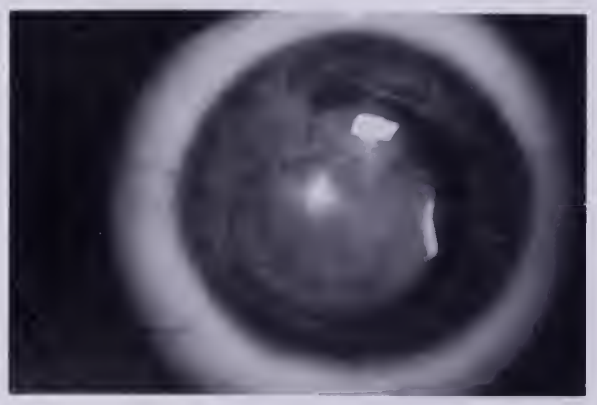

Figure 2. Corneal scar due to recurrent herpes simplex keratitis.

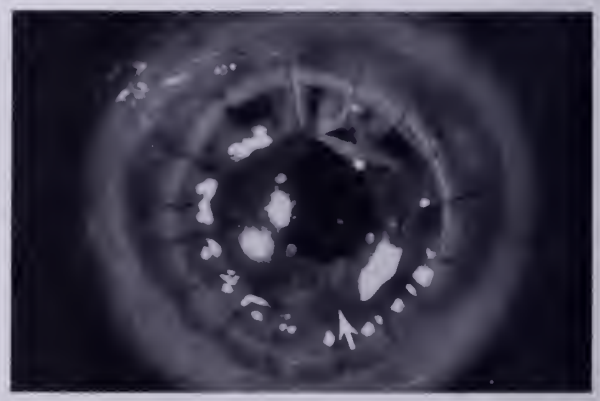

Figure 5. Postoperative, same eye as in Figure 4 with intraocular implant (arrow).

created by removal of diseased tissue. The donor cornea is sutured to the recipient with 10-0 nylon in a continuous or interrupted fashion. Extreme care is taken not to traumatize the single layer of endothelium during the operation. The most important factor in successful corneal transplantation is the preservation and transfer of corneal endothelium from donor to recipient. The sutures are usually left in place for 6 to 12 months, depending on the amount of peripheral vascularization.

Keratoplasty is combined with cataract extraction when opacities of the cornea and lens co-exist (combined procedure). If an artificial lens also is implanted, the operation is called a triple procedure.

Postoperative Complications: Postoperative problems associated with corneal transplantation are nonimmunologic and immunologic. The first group includes infection, hemorrhage, suture breakage, wound leakage, high astigmatism, and glaucoma. Most of these complications can be minimized by meticulous surgical techniques. Slightly oversize donor buttons may decrease the incidence of glaucoma.[9] Postoperative antiglaucoma medications also may be necessary.

TABLE 1

Common Indications for Corneal Transplantation

1. Keratoconus
2. Herpes Simplex
3. Trauma
4. Dystrophy
5. Aphakic bullous keratopathy
6. Active or chronic inflammation
7. Interstitial keratitis
8. Chemical burn
9. Congenital corneal opacity
10. Corneal degeneration

Figure 6. Alkaline burn with extensive neovascularization of the cornea.

The clinical presentation of corneal graft rejection has become a subject of interest. The avascular cornea originally was considered to represent a privileged site, free from recognition by host defenses as a foreign tissue. While blood types do not affect graft acceptance, histocompatibility antigens (HLA) have been shown to play a role in the rejection process if the recipient cornea is vascularized and/or has rejected previous transplants.[10,11] Successful regrafting can be done in spite of previous graft failure (Figures 7,8).

The prognosis for a corneal transplant depends considerably on the pathology of the recipient cornea.[12] The success rate is excellent (better than 90 per cent) in keratoconus, Fuchs' corneal dystrophy, and central scars with minimal or no vascularization. The prognosis is fair to poor in vascularized corneas (e.g., chemical burns), dry-eye syndromes, and active corneal infections. In general, the degree of vascularization seems to play a significant role in determining the final outcome in keratoplasty. The availability and use of corticosteroids is an important step in preventing graft reactions since

Figure 7. Rejection of corneal graft.

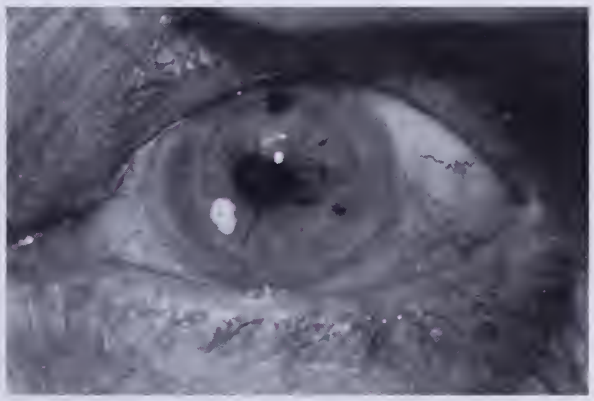

Figure 8. Same eye as in Figure 7, after successful regraft.

the steroids control the inflammation as well as the tendency for vascularization of the cornea.[13]

Graft rejection may either be acute or delayed. Any layer of the cornea may be rejected, but endothelial layer rejection is most serious. It is an ophthalmic emergency and is manifested by one or all of the following: pain, conjunctival injection, and blurring of vision. Patients with graft rejections need immediate topical and systemic steroids.[14]

Eye Banks

Because of the difficulties involved in acquiring healthy corneas for transplantation when needed, eye banks have emerged. The first eye bank was established in New York in 1944. Today there are about 71 eye banks in the United States.

An eye bank coordinates all of the following activities: securing consent for tissue donation; harvesting eyes; transporting eyes to the eye bank facility; and evaluating, processing, and finally distributing tissue for either surgery or research. Probably the eye bank's most valuable contribution to the success of corneal transplant surgery is in the evaluation and processing of donor corneas.

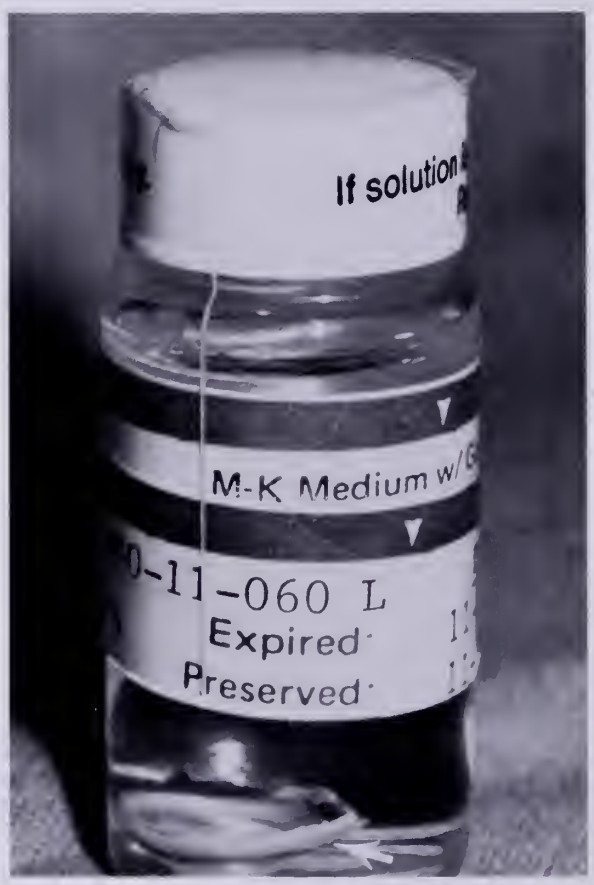

Figure 9. Cornea with scleral rim (arrow) stored in MK medium (tissue culture medium 199).

One major problem faced by eye banks was increasing the time that a cornea remains viable for transplantation. The technique of storing the tissue at four degree C. in a moist chamber was adequate for 24-36 hours; beyond this period, its viability could not be insured. The question of increasing corneal viability had been raised many decades ago, when blood was used as a corneal storage medium. During the last two decades, the technical aspects of corneal surgery have improved, and demand for tissue has increased. Hence, methods of long-term storage have been investigated. Corneas were frozen at -179 degrees C. in the industrial solvent dimethyl sulfoxide. This method, while allowing greater flexibility, is tedious and therefore not practiced.

A significant breakthrough in corneal storage was the introduction of MK medium in 1973.[15,16,17] In this simple technique for short-term preservation (four days), the donor cornea with a 3-mm. scleral rim is placed in tissue culture medium 199 and five-per cent dextran (Figure 9). Most eye banks use this method.

Legislation Takes Time

In most countries, legislation to facilitate the procurement of human tissue for transplantation has been obtained through a long process of appeals, delays, and conflicts because of the nature of laws and incomplete understanding of medical advances by the public. Such problems are universal. Laws were not clear as to the right of an individual to donate organs at death, and ethical as well as moral issues confronted the surgeon. In 1968, the United States passed the Uniform Anatomical Gift Act in response to these shortcomings and the need for more human tissue.

In 1974, Payne composed the wording of a statute that was enacted by the Maryland legislature in 1975. The law was carefully written in order to elicit the support of the public, legislators and morticians. This law, the first of its kind, allows donor corneal tissue with a rim of sclera to be removed immediately from the eyes of any medical examiner's case requiring autopsy, unless specifically forbidden by the next of kin. In effect, the law makes it unnecessary to consult the next of kin for permission; thus, most autopsied cases are potential donors. Since its inception the Maryland Eye Bank has received more than 7,000 corneas. Following the example of Maryland, nine other states have now passed similar laws. All these states experienced a great improvement in the

supply of donor tissue without public controversy. A bill introduced to effect this objective was not acted upon by the 1982 session of the West Virginia Legislature. It is hoped that this issue can be re-examined by the Legislature and an appropriate law enacted in the near future.

Quality control becomes very critical if an eye bank undertakes this sort of a program. The source of donor material must be carefully screened to avoid using donor tissue from persons with known or unsuspected diseases that might be contraindicated. Patients who have died of cancer may be transplant donors except those with lymphomas, leukemic disease, or cancer of the eye. The criteria for donor selection are summarized (Table 2).[18]

Transmission of Donor Diseases to Corneal Recipients

Several disastrous results have occurred because of donor tissue contamination.[19] Bacterial and fungal endophthalmitis, Creutzfeldt-Jakob disease, and rabies have been reported (Table 3).

Case Report

The following case illustrates a typical situation of a patient with corneal blindness who underwent corneal transplantation.

In April, 1976, the patient awakened with a burning sensation in her left eye accompanied by constant tearing. After enduring these symptoms for two to three hours, she reported to a local medical center where she was referred to an ophthalmologist who prescribed eye drops. Her symptoms recurred approximately every two months for the next two years, during which time she remained under the care of her ophthalmologist, who treated her for recurrent virus infection of the left eye. She subsequently was referred to the Eye Clinic at West Virginia University Medical Center in Morgantown. At the time of her first visit to the Eye Clinic in the winter of 1980, she had a scar on her cornea and could see nothing but light in the affected eye. Her right eye was within normal limits with visual acuity of 20/20.

At the WVU Eye Clinic, she was diagnosed as having a herpetic corneal scar, and a corneal transplant was advised. She was put on the Baltimore Eye Bank's waiting list for a corneal transplant, and a few months later she underwent surgery at the WVU Medical Center.

Before the operation, she was given topical antibiotics. The corneal transplant operation was performed under local anesthesia. She recalls that the shots prior to surgery were painful. The operation itself lasted 80 minutes. During the operation she recalls feeling pressure but no pain, and she remembers conversing with the surgeon.

Twenty-four hours later, the dressing on the eye was changed. At this point her hopes were high that the transplant had taken, but she was alarmed at the soft, slippery feeling of the eye. She experienced no postoperative pain. She recalls being able to see her surgeon's hand at this point—already a distinct improvement in vision from her preoperative condition.

When she left the hospital after a stay of three days she was able to see two lines on the Snellen Chart. Prior to leaving the hospital, she was advised to use eye drops and to avoid lifting and bending. She also was told to wear an eye shield at night and to return to the Eye Clinic in a week for follow-up examination.

Subsequent examinations occurred at three weeks, one month, one and a half months, and so on. The operated eye was followed closely for the first six months, and she was told to report to the Emergency Room immediately if she experienced redness, blurred vision, or pain in the eye—all of which are signs of graft re-

TABLE 2

Criteria for Donor Selection

1. Age: Most surgeons prefer donor ages to be 2 to 65 years. (Any age may be acceptable.)
2. Previous donor history which excludes transplantation:
   a. Systemic: syphilis, hepatitis, slow virus diseases (e.g., Creutzfeld-Jakob), septicemia, rabies, blast forms of leukemia. b. Ocular: glaucoma, uveitis, corneal disease, trauma, surgery, anterior segment tumors.
3. Death to enucleation: Less than 6 hours at room temperature; longer if the body is refrigerated.
4. Enucleation to storage: As short a time as possible.
5. Donor exam which excludes transplantation:
   a. Corneal scars, large epithelial defects
   b. Guttate changes
   c. Abnormal endothelium (specular microscopy)
6. Storage:
   a. 36 hours in moist chamber at +4 degrees Celsius
   b. Up to 96 hours in MK medium

Modified from Binder[18]

TABLE 3

Transmission of Donor Diseases to Corneal Recipients

1. Bacterial endophthalmitis
2. Fungal endophthalmitis
3. Slow virus disease (Creutzfeldt-Jakob)
4. Rabies

jection. Happily, she experienced none of these symptoms.

At her last visit to the Eye Clinic six months after surgery, her vision was 20/30. Today she is on topical antiviral medication and topical steroids once a day.

Thus far she has had an excellent surgical outcome, but still fears recurrence of herpes simplex in the corneal graft as well as in her other eye—a fear with which patients suffering from herpes simplex must always live.

Conclusion

After a century and one half of experimentation, technical perfection, and scientific advancement, we have perfected the process of corneal transplantation to the point where postoperative complications and rejection rates are lower than for any other homologous organ transplants.

In West Virginia more than 100 corneal transplants are performed yearly. However, at least 50 to 100 more transplants would be performed if donor corneas were readily available. Waiting periods can be extremely long (three to nine months) and frustrating for afflicted patients, especially when they are aware that surgery would restore their vision.

The waiting period would be shortened considerably if corneas were more readily available in West Virginia as they are in those other states which have enacted legislation permitting access to corneas of all recently deceased cases coming under the aegis of the medical examiner. Tissue not used for transplantation would be valuable for research and teaching purposes.

Corneal blindness is most often curable.

And Now For A Quiz On The Material Presented Above!

(Answers on Page xvi)

1. The most successful of the homologous transplants is:
   a. Heart
   b. Kidney
   c. Cornea
   d. Liver
2. After enucleation of the eye, the donor cornea can usually be stored up to:
   a. 2 weeks
   b. 4 weeks
   c. 4 days
   d. 6 months
3. The normal cornea is:
   a. Less than 1mm thick
   b. 5mm thick
   c. 10mm thick
   d. 15mm thick
4. Prognosis for corneal transplant is excellent in:
   a. Keratoconus
   b. Alkaline burns
   c. Vascularized cornea
   d. All of the above
5. Cytotoxic and/or antimetabolite drugs are usually given after a corneal transplant.
   a. True
   b. False
6. All the following diseases are known to be transmitted by donor cornea to recipient *except*:
   a. Rabies
   b. Infective endophthalmitis
   c. Creutzfeld-Jakob disease
   d. Diabetes
7. Donor history which makes the cornea unsuitable for transplantation *except*:
   a. Syphilis
   b. Disease of obscure or unknown etiology
   c. Alcoholism
   d. Septicemia
8. Corneal graft rejection may be manifested by all of the following *except*:
   a. Red eye
   b. Blurring of vision
   c. Pain
   d. Double vision
9. The most important functional layer of the cornea is:
   a. Endothelium
   b. Stroma
   c. Bowman's layer
   d. Descemet's membrane
10. Corneal transplant is usually sutured with:
    a. 9-0 silk
    b. 10-0 nylon
    c. 6-0 nylon
    d. Absorbable suture

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Manuscript Information

Manuscripts to be presented for publication in *The West Virginia Medical Journal* should be typewritten, triple-spaced, on one side only of firm (no onion skin or flimsy), standard letter sized (8 ½ by 11 in.) white paper. Wide margins (at least 1 ¼ in. on left) should be left free of typing. On the first or title page should be shown the title of the article, the name (or names) of the author, and his degrees. Pages should be numbered consecutively, the page number being shown in the right upper corner along with the surname of the author.

Where reference is made to generically-designated drugs, the first such reference must be followed by parentheses containing the most commonly known trade-name drug of that designation. In addition, a listing of all generic drugs mentioned in the article, with their trade-name equivalents, should appear at the end of the article.

A short abstract summarizing the manuscript should be included. This should be typed in double space on a separate page.

Authors are requested to submit a carbon copy with the original.

Illustrations should be numbered and their approximate locations shown in the text. Each should be identified by placing on its back the author's name, its number and an indication of its "top." Drawings and charts intended for reproduction should be done in black (India) ink on pure white. Photographs should be on glossy paper and minimum of about 5 by 7 in. in size. Cost of printing black and white photos in excess of 4 will be billed to author, and no more than 25 references will be published free of charge to the author. A legend should be provided for each illustration and, preferably, attached to it.

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Second-Generation Antidepressants: Maprotiline

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Intensive research in the psychobiology and psychopharmacology of depressive illness has produced a new generation of antidepressant medications. As with previous antidepressants, their pharmacologic and side effect profiles are complex and diverse. Given the difficulties in treating depressive illness, a knowledge of the actions and properties of these medications is essential for the treating physician. The present article will focus on maprotiline, a newly marketed tetracyclic antidepressant. A future article in this Journal *will review trazodone, which is neither a tricyclic nor a tetracyclic and has a rather unique pharmacologic profile.*

PHARMACOTHERAPY for depression dates from 1957 when Kuhn first utilized the antidepressant effect of imipramine, and Kline did the same with monoamine oxidase inhibitors. In rapid succession several tricyclic-type antidepressants were introduced in this country, all with similar efficacy and each with specific advantages and disadvantages. This rapid proliferation was followed by a hiatus of more than a decade with no new antidepressants introduced in the United States. In contrast to the situation here, antidepressive medications continued to be marketed abroad and, by 1980, more than 40 different products were available to European physicians.

Recently, however, several "new" (to this country) antidepressants have received final approval by the Food and Drug Administration, and several others are under active study. Two of these newly available compounds, maprotiline (Ludiomil) and trazodone (Desyrel), differ both in structure and pharmacologic properties from the previously available tricyclic compounds, and truly represent a "second generation" of antidepressants. These two specific compounds are not tricyclics and do not fit all of the pharmacologic profiles of previous antidepressants. They do have specific norepinephrine (N.E.) and serotonin (5-HT) effects, and therefore mesh with the concept of functional, if not actual, depletion of these CNS neurotransmitters mediating, if not actually initiating depressive illness. Maprotiline has powerful N.E. effects with minimal effect on 5-HT[1] while trazodone does exactly the reverse. This complementary effect on important neurotransmitters has interesting potential both in research and clinical work. A comparison of some basic pharmacologic effects of two standard tricyclics and of these two "new" antidepressants is presented in Table 1.

Although quite effective, none of the "second-generation" products is clearly more effective than tricyclic products. Their advantages are reduced side effects and toxicity and, in some patients, faster onset of action.

The following case demonstrates these features specifically with maprotiline.

Case Review

J. F., a 38-year-old white male, was referred by his family physician due to a two-month history of increasing depressive symptoms. Prior to referral, a three-week trial of doxepin 125-150 mg/day had been of little benefit and had produced very bothersome anticholinergic side effects of dry mouth and constipation as well as considerable grogginess and sedation. At the time of referral the patient had clear and moderately severe symptoms of endogenous depression including pervasive depressed mood, early morning awakening, reduced energy and interests, and self-denigrating ruminations. Previous medical and psychiatric history were unremarkable, but there was a positive family history. The patient's father had suffered from

TABLE 1
Antidepressant Pharmacologic Profiles

Antidepressant[1]	*Norepinephrine potentiation*	*Serotonin potentiation*	*Anticholinergic effect*	*Sedation*
Imipramine (Tofranil)	++	+	++	++
Amitriptyline (Elavil)	+	++	+++	+++
Maprotiline (Ludiomil)	+++	—	+	+
Trazodone (Desyrel)	—	+++	+ —	++

[1] including *in vivo* effects of major metabolites

a similar episode at age 50 with a very favorable response to imipramine.

J.F. was then likewise started on imipramine with a gradually increasing dosage up to 150 mg/day. After approximately three weeks there had been a definite diminution of the depressive symptoms, but the patient had again developed considerable side effects, similar to those seen during doxepin usage. He also had developed sympathomimetic-type effects of restlessness and tremor which were distinctly uncomfortable for him. An imipramine serum level was in low therapeutic range, well below levels generally seen with true drug toxicity.

At this point the imipramine was tapered and the patient started on maprotiline. Dosage again was increased slowly to an eventual level of 200mg/day. The depressive symptoms again diminished markedly, and the patient had only mild and tolerable side effects, primarily dry mouth. He returned to work and subsequently did well.

The above case report illustrates two important factors in antidepressant therapy. The first is that a depressed patient may respond positively to only certain specific antidepressants. All antidepressants, including the second-generation compounds, have equal overall efficacy when dealing with large numbers of patients. Nevertheless, many patients will respond selectively to only one or more specific drugs and fail on others. There are at present few clinically useful methods to determine drug responsiveness in advance, but research in this area is promising. The patient above failed to respond to doxepin, but later responded well to maprotiline. The reverse could have been equally possible.

Secondly, this case illustrates that antidepressant side effects can be significant and produce limitations to treatment of depressive illness. Although no more effective than their predecessors, the second-generation compounds do produce fewer side effects and, in some cases, this can be a decisive advantage. Parenthetically, the intensity of suffering and pain brought about by depressive illness is shown clearly in this case. In spite of the previous uncomfortable side effects, the patient agreed with little hesitation to a trial on a similar medication.

Maprotiline

Maprotiline is the first non-tricyclic antidepressant to be available in the United States. It actually has a tetracyclic structure and, pharmacologically, has considerable effects on norepinephrine, but essentially no effects on serotonin. Interestingly, there is research indicating that depressed patients with CNS norepinephrine abnormalities will respond selectively to maprotiline and other norepinephrine-affecting compounds.[2] Imipramine also primarily affects norepinephrine, and the patient noted above responded to both imipramine and maprotiline but had intolerable side effects to the former.

Pharmacokinetics

Maprotiline is well absorbed from the G.I. tract both in tablet and in liquid form, with peak blood levels from an oral dose occurring in 8 to 24 hours. In serum it primarily is bound to proteins and then widely distributed and found in essentially all organ systems.

Steady-state levels are reached in seven to 10 days, a time period not affected by dosage. As expected, the actual level of steady-state concentration is directly proportional to dosage.[3] As is common with all antidepressants, there is considerable variation in the dose-to-plasma-level relationship between patients. In most patients 150 mg/day produces an adequate serum level, but some will have sub-therapeutic levels and others toxic serum levels on this same dosage. Individual dosage titration is crucial for safe and effective antidepressant usage.

Maprotiline has a serum half life of about 43 hours. It is metabolized in the liver to both active and inactive metabolites and then excreted both in urine and bile.

Onset of Action

One difficulty with tricyclic antidepressants is the delay period of 14 to 21 days necessary before significant clinical response generally occurs. Several investigations comparing maprotiline to various tricyclics have found it to have faster onset. Standard rating scales have found maprotiline superior at days 7 and 14, and then equalled by the tricyclics at day 21.[4]

It must be noted that there are conflicting studies which do not demonstrate a more rapid action. Unfortunately, early clinical trials of several previous antidepressants raised similar hopes, but these hopes proved to be illusory.

Efficacy

Maprotiline has been used extensively outside of this country for several years, and its effectiveness in treating depression cannot be seriously challenged. Overall, its efficacy and

spectrum of action are very similar to those of standard tricyclic agents.

The single most important factor in the efficacious use of maprotiline is not any property of the drug itself, but rather is proper selection of patients. If the physician limits the use of maprotiline to patients with true endogenous, biochemically mediated depressive illness, the overall frequency of response is quite high, around 80 per cent in most studies. Maprotiline response is less predictable in patients with "neurotic" depression, chronic depression, or depressions with schizoid character structure, as is true with all other antidepressants. The therapeutic dosage (100-300 mg/day) is similar to that of other antidepressants, and must be individually monitored. Treatment should be initiated at a low dose, 25 to 75 mg/day, and then slowly increased to a more effective level over a one- to two-week period.

Side Effects

Side effects of antidepressants are a frequent and sometimes difficult problem. They include anticholinergic effects, sedation, and cardiovascular difficulties including postural hypotension. Also seen are sympathomimetic effects of agitation, tremor, and vasoconstriction. Maprotiline possesses these same effects, but *in most patients* they are less frequent and less intense.

TABLE 2

Incidence of Postural Hypotension and Sinus Tachycardia*

	Postural hypotension	*Sinus tachycardia*
Doxepin	2.6%	2.9%
Amitriptyline	8.6%	30.0%
Maprotiline	1.6%	4.2%
Imipramine	10.0%	14.0%

* data from Hattab[5]

Compared to previous agents, maprotiline seems to have less pronounced cardiovascular effects, including postural hypotension.[5] This is a particularly frequent cardiovascular finding and can cause significant morbidity, especially in the elderly.

Orthostatic hypotension can lead to loss of balance or even syncope which, in elderly patients, can result in anoxic damage or fractures. As noted in Table 2, this side effect seems less frequent with maprotiline.

Conclusion

Maprotiline, a second-generation antidepressant, is the first non-tricyclic agent available in the United States. Although no more effective than the tricyclics, it possesses fewer side effects and toxicity, a definite advantage when considering antidepressants.

Pharmacologically, it has marked norepinephine effects, but essentially no action on serotonin. It can benefit some patients who are refractory to other medications, and is a worthwhile addition to the pharmacologic treatment of depressive illness.

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1982 Van Liere Memorial Student Research Convocation, WVU School Of Medicine

THE 1982 Van Liere Memorial Research Convocation for students in the West Virginia University School of Medicine was held on April 1. These yearly convocations enable students in the School of Medicine to present the results of their research activities in competition for the Edward J. Van Liere Award.

This award, consisting of a plaque and a check for $200, was established by action of the faculty of the School of Medicine to recognize the research efforts of our students and to honor the late Dr. Edward J. Van Liere, who served as Chairman of the Department of Physiology from 1921-1955 and as Dean of the School of Medicine from 1935-1961.

Twelve students participated in the 1982 Research Convocation, which was the eighteenth one in the series. Although three of these students were ineligible to compete for the Van Liere Award because they presented data from research done in partial fulfillment of the requirements for a master or a doctor degree, they did compete for prize money equal in value to the monetary awards associated with the Van Liere Award competition.

The winner of the Edward J. Van Liere Award this year was Valerie Lazzell, a second-year student. The first runner-up and winner of a check for $100 was Charles Weber, a first-year student, and the second runner-up and winner of a check for $50 was David Allison, a fourth-year student. In addition, James Freese, a first-year student who was ineligible to compete for the Van Liere Award, was awarded a check for $100.

The publication of the winning abstracts of the oral presentations in *The West Virginia Medical Journal* constitutes an important and greatly appreciated recognition of the research efforts of our students.

W. E. Gladfelter, Ph.D., *Chairman*
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Effect Of Orally Administered Killed Influenza Vaccine On The Secretory Immune Response In Humans

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THE effects of the commercially-available inactivated influenza vaccine (A/Bangkok/79, A/Brazil/78, B/Singapore/79) administered by various routes on the secretory immunoglobulin A (sIgA) response in the nasal secretions of adult human volunteers was evaluated. The novel aspect of the study was the administration of the vaccine to one group using enteric-coated capsules, testing the hypothesis that specialized collections of lymphoid cells in the small intestines have IgA-precursor cells which circulate and populate all mucosal sites.

A double-blind study was conducted consisting of three groups—oral vaccine, intramuscular vaccine, and placebo. Nasal washings were collected on days 0 and 21, concentrated 10x and stored at -80°C for antibody and IgA determination. A viral plaque reduction assay technique was employed to measure the antibody titer in the nasal washings with A/Bangkok/79 as the test virus. Serum samples were collected for determination of antibody levels utilizing the hemagglutination inhibition test, and serum D-

TABLE

	Immunization Route		Antibody Response*		
Group	Oral	Intra-muscular	Nasal	Serum	Side Effects
Placebo	Placebo	Placebo	0/8	0/8	Minimal
IM	Placebo	Vaccine	4/8	6/8	Moderate
Oral	Vaccine	Placebo	4/8	0/8	Same as Placebo

*Number showing 4 fold or greater rise/number of volunteers in group.

xylose levels to insure that the capsules dissolved in the small intestines. Side effects were assessed in all volunteers during the first two weeks of the study (Table).

The results indicate that orally-administered killed influenza vaccine stimulates secretory immunity, and may prove superior to intramuscular injection in providing for immunological protection in terms of equal protection, improved convenience and less toxicity. This approach to immunization, if substantiated for all external mucosal sites, could make effective vaccine development possible with respect to other mucosal infections. The development of a successful oral vaccine would offer a simple, safe and cost-effective method of immunization serving as one approach towards preventive medicine.

Hormonal And Nutritional Factors Influencing Glycogen Deposition In Primary Cultures Of Rat Liver Parenchymal Cells

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THE influence of glucose, insulin, and glucocorticoids on glycogen deposition in adult rat liver parenchymal cells in primary culture has been studied. Adult rat liver parenchymal cells were obtained by a collagenase perfusion technique and inoculated onto collagen-treated plates with serum-free Waymouth's tissue culture medium (containing 27.8 mM glucose) for eight hours. The hepatocytes were then incubated in Swim's S-77 tissue culture medium (containing 5.6 mM glucose) for 12-16 hours, thus depleting the glycogen content of the cells. Fresh Swim's S-77 medium was added, and the hepatocytes were then subjected to various conditions.

Increasing glucose concentrations from 5.6 mM to 30.6 mM in the absence of hormones increased cellular glycogen content from 6.5 to 51 μg of glycogen per mg of cell protein. Treatment of the cells with insulin increased glycogen content 15 to 30 per cent at medium glucose concentrations above 10.6 mM. The addition of the synthetic glucocorticoid, dexamethasone, to the culture medium resulted in 40- to 105-per cent increases in glycogen content at glucose concentrations greater than 5.6 mM. The addition of dexamethasone and insulin together resulted in an increase in glycogen content that was greater than the additive effect of each hormone alone.

This study establishes that glucose concentrations above 10.6 mM stimulate glycogen deposition in the absence of any hormonal stimulus. In addition, glucocorticoids directly stimulate glycogen deposition at glucose concentrations which are greater than physiological (5.6 mM).

Organ Perfusion With Freon 11

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CRYOPRESERVATION of intact organs requires intravascular, temperature-controlled cooling. The ideal perfusate would be non-toxic to cells, easily controlled, and would remain in the liquid phase throughout the cooling process. Freon 11 satisfies these criteria. This study was undertaken to observe the results of renal perfusion with Freon 11.

Dogs were anesthetized with intravenous pentobarbitol. Renal harvesting was accomplished through a midline incision. The renal artery and vein were cannulated, and arterial perfusion was begun with 12.5-per cent Dimethyl Sulfoxide at 4°C. After 15 minutes of perfusion with DMSO, the kidney was transferred to a computer-controlled cooling chamber. Perfusion

with Freon 11 was accomplished by means of a rate-controlled, pressure-monitored roller pump. A copper coil within the cooling chamber cooled the Freon 11 prior to perfusion of the renal artery. Intraarterial perfusion was begun at 0 C and the kidney cooled at -40 C. The kidney was then transferred to a -196 C-freezer for storage.

Renal biopsies obtained after one week of storage demonstrated normal morphology. The mitochondial swelling and disruption of histology seen with previous methods of cryoperfusion were not evident. Intraarterial perfusion with Freon 11 thus may permit whole organ cryopreservation.

An In-Situ Rotating Voltammetric Membrane Chlorine Dioxide Electrode

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THE use of chlorine for the disinfection of drinking water has been shown to produce trihalomethanes (THM), of which chloroform was found to be the most abundant. The National Cancer Institute has published results of a study showing that chloroform in high doses caused cancer in laboratory animals. The Food and Drug Administration has issued a ban on the use of chloroform as an additive in the preparation of foods and drugs.

Chlorine dioxide (ClO_2) is a potential alternative to chlorine, and has been shown to prevent or reduce THM production. The electrochemistry of ClO_2 was studied, and a rotating voltammetric membrane electrode constructed for the measurement of ClO_2. Different membranes and buffer systems were used to study the sensitivity, response time and effect of temperature on the electrode. A calibration curve demonstrated the capability for sub-part-per-million measurement and long-term stability of this electrode system. The electrode was then used for the determination of ClO_2 in tap water, river water and sewage effluent, and the results were compared to other "standard" methods.

Medical Grand Rounds

From the West Virginia University Medical Center

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Herpes Simplex Encephalitis

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Herpes simplex encephalitis is the most common non-epidemic and potentially fatal focal viral central nervous system infection in the United States today.

The clinical picture of herpes simplex encephalitis is one of evolution over several days, and consists of confusion, personality disturbance, speech abnormality and a variety of other focal findings. An older and somewhat forgotten study, the radionuclide brain scan, may show uptake in one or both temporal lobes early in the illness preceding the occurrence of wide-scale tissue destruction.

Studies have established that the biopsy-proven herpes simplex encephalitis mortality rate is 70-80 per cent in the untreated population, and about 30 per cent in the vidarabine-treated group. Vidarabine, while an efficacious drug in the treatment of the disease, is not without its drawbacks. Clinical trials using acyclovir are under way, but there are reports of strains of herpes virus which are resistant to the agent.

HERPES simplex encephalitis is the most common non-epidemic and potentially fatal focal viral central nervous system infection in the United States today. While no single clinical picture is characteristic of herpes encephalitis, symptoms and signs of temporal lobe disease predominate and are a reflection of the localization of the infectious process. The use of vidarabine early in the disease has decreased the mortality and morbidity significantly, though vidarabine is not without serious toxicities.

History

Over 3,000 years ago a Mesopotamian medical text associated headache with fever, what was later called "brain fever."[1] One quickly recognizes this description could apply to a variety of ailments. Brain fevers and sleeping sickness were recorded during the Middle Ages, but anatomical localization and differentiation of syndromes were not accomplished until the 17th century with the application of examination of pathologic tissues. Beyond that, the most marked advance occurred with the ability to examine cerebrospinal fluid. As a medical student in the latter half of the 19th century, Heinrich Quincke developed the technique of lumbar puncture.[2] This led to the delineation of numerous infectious and non-infectious diseases of the central nervous system.

There was a great deal of excitement in 1917 surrounding Von Economo's studies of encephalitis and its possible viral cause, but the disease disappeared before the availability of modern virologic techniques. The roots of virology are founded in botany, and the visualization of viruses awaited the development of the electron microscope in the 1930s. Virology then exploded as a field as viral isolation and identification techniques developed.

Clinical Picture

The clinical picture of herpes simplex encephalitis is one of evolution over several days,

and consists of confusion, personality disturbance, speech abnormality and a variety of other focal findings. Low-grade fever as well as headache is almost a universal finding upon presentation. Seizures, either focal or generalized or both, occur in two thirds of all patients who have positive brain biopsies. Hemiparesis, cranial nerve defects, and vomiting are present in approximately 30 to 40 per cent of patients upon presentation.[3,4,5] While herpes simplex encephalitis is a focal disease, the absence of focal neurologic symptoms or signs upon presentation should not dissuade one from entertaining the diagnosis of herpes encephalitis. It is of utmost importance in the outcome of the disease for the correct diagnosis to be made before serious neurologic findings are present so antiviral therapy may be administered early to prevent serious sequelae.

Disease occurrence is constant in all age groups. Both sexes are equally affected. There is no seasonal variation.

Differential Diagnosis

The differential diagnosis of herpes simplex encephalitis includes other viral infections, fungal infections, abscess, tumor, thromboembolic vascular disease, and vasculitis.[1,6,7] The clinical setting, including the usual neurodiagnostic studies, frequently does not allow reasonable assurance of the correct diagnosis.

Cerebrospinal Findings

Cerebrospinal fluid examination in the evaluation of herpes simplex encephalitis adds little to the specificity of the diagnosis. A modest elevation of CSF protein, median 80 mg/dl; modest pleocytosis, median WBC count 130 cells/mm.^{3} and normal glucose are the usual findings. Herpes simplex virus cannot be recovered from the CSF. However, normal CSF patterns as well as patterns suggestive of a bacterial infection have been seen in cases of brain biopsy-confirmed herpes simplex encephalitis.[1,3,4]

EEG Findings

The electroencephalogram often shows diffuse, high-amplitude rhythmic or arrhythmic slow-wave abnormalities. The presence of unilateral or bilateral periodic lateralizing epileptiform discharges (PLEDs) suggests, though is not conclusive, of a diagnosis of herpes simplex encephalitis.[1,3,4]

Neuroradiological Evaluation

The dawn of computerized tomography resulted in a reliance upon this study's positivity or negativity as strong evidence for or against the diagnosis of herpes simplex encephalitis. Abnormalities on computed tomographic scans appear late, the most common finding being an area of decreased absorption coefficient in one or both temporal lobes, representing necrotic tissue for the most part. Therefore, the tendency to rely upon this technological trapping as a critical decision-making study must be discouraged. An older and somewhat forgotten study, the radionuclide brain scan, may show uptake in one or both temporal lobes early in the illness preceding the occurrence of wide-scale tissue destruction.

Etiology and Pathogenesis

This focal non-epidemic encephalitis is caused by the herpes simplex virus, a DNA virus which contains a glycolipid envelope and replicates in the host cell nucleus. There are two antigenically related strains of herpes simplex virus. Type 1 herpes simplex virus is a ubiquitous agent, and nearly 90 per cent of the adult American population has antibody to the virus.[1]

Primary infection generally occurs during childhood, and may be asymptomatic or may cause gingivostomatitis, pharyngitis, or respiratory disease. During the primary infection the virus is transported via the sensory nerve to reside in a latent posture in the trigeminal ganglion.[1] Wallenberg, in 1895, suggested the trigeminal pathway as the site of herpetic latency in a patient who developed herpetic eruptions on one side of the face which had been rendered anesthetic by a lateral medullary infarction.[8] In 1904 Cushing suggested the trigeminal ganglion as the viral latency household.[9] Baringer, in 1973, reported the recovery of type 1 herpes simplex virus from 40 per cent of trigeminal ganglia from routine autopsies.[10]

Anatomical studies have shown the meninges of the anterior and middle fossa to be innervated by fibers derived from the trigeminal nerves. The innervation is concentrated in basilar structures corresponding to the anatomical localization of herpes encephalitis. Nonspecific factors may cause reactivation of the latent herpes simplex virus, with the usual clinical manifestation being a recurrent oropharyngeal cold sore. On rare occasion it presumably spreads along the meningeal neurofibers with resultant cerebral infection.[11]

Pathology

Herpes simplex viral infection preferentially involves the inferior medial temporal lobes and olfactory portions of the frontal lobes, affecting

the gray and white matter, but mainly the gray. A prominent perivascular inflammatory infiltrate is diagnostic of the inflammatory encephalitic nature of the disease. This leads to stasis and cellular diapedesis. The neurons undergo severe shrinkage with eventual conversion to pale, eosinophilic structures. Viral inclusion bodies, Cowdry type A inclusions, are present in nuclei of many oligodendrocytes and neurons. These inclusions are acidophilic and may be homogenous or granular. The inclusions vary in size from two microns in diameter to almost the size of the nucleus in which they lie. Unless they fill the nucleus completely, the inclusions may be surrounded by a clear halo. Sometimes fine radiating lines can be seen joining the inclusion body to the nuclear membrane.[12]

Brain Biopsy

The definitive diagnosis of herpes simplex encephalitis depends upon the open-brain biopsy of the affected area, which most often is the medial inferior temporal lobe. Because of the wide variety of other potentially treatable diseases which may mimic herpes encephalitis, one must confirm the diagnosis so that proper treatment may be rendered.[13] The diagnosis of inflammatory encephalitis may be confirmed by morphologic criteria, but the precise diagnosis depends upon the isolation and identification of the herpes simplex virus. Inasmuch as not all virology laboratories are adept at isolating this virus, a patient suspected of having herpes encephalitis should be referred to a medical center where a good virology laboratory is available. Immunofluorescent staining studies of brain biopsy tissue may be useful, but this has a 37-per cent false negative yield.[1]

Treatment

The treatment of herpes simplex encephalitis is an evolving story. In 1966 and 1967 there were two articles about the same patient with herpes encephalitis who was treated with IUDR (5-iodo-2′-deoxyuridine)[14] and surgical decompression[15] and survived. In 1972 a controlled trial of IUDR and vidarabine was undertaken; early in the study it was demonstrated that IUDR was quite toxic yet ineffective.[16] Studies now have established the biopsy-proven herpes simplex encephalitis mortality rate to be 70-80 per cent in the untreated population, and to be about 30 per cent in the vidarabine-treated group. Two important determinants of prognostic significance emerged from those studies: age and level of consciousness upon initiation of therapy. Treated patients under age 30 had a mortality rate of 24 per cent while those over 30 had a mortality rate of 52 per cent. Patients who are lethargic at the initiation of therapy had a long-term mortality rate of 26 per cent versus 53 per cent for the semicomatose or comatose patient.[6]

Severe, debilitating neurological sequelae are seen in 50 per cent of biopsy-proved herpes encephalitis patients who survive the illness. These sequelae include seizures, major motor and sensory deficits, aphasia, and often a Korsakoff's-type amnestic syndrome.[1,6]

Vidarabine, while an efficacious drug in the treatment of herpes simplex encephalitis, is not without its drawbacks. As a consequence of its solubility characteristics, vidarabine must be delivered in large volumes of fluid which limits the total amount which can be administered, and possibly may contribute to cerebral edema. The monophosphate derivative of vidarabine is more soluble, and thus is perhaps a more desirable agent in that regard. Clinical trials currently are under way to evaluate the monophosphate form. Aside from those considerations there are increasing reports of CNS toxicity related to vidarabine.[17-21]

Acyclovir, an acyclic quanine derivative, is being touted as the new wave in antiviral therapy. Its mode of action is dependent upon phosphorylation by thymidine kinase, which is present only in cells infected by herpes virus.[22] Clinical trials using this agent to treat herpes simplex encephalitis as well as other herpes virus diseases are being conducted. To dampen early enthusiasm about acyclovir are reports of strains of herpes virus which are resistant to the agent.[23,24]

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Higher Blood Pressure Inevitable

An exhibit on display in San Francisco recently illustrated that blood pressure increases with age, regardless of whether the patient has high blood pressure or not. According to the exhibit, it is just more pronounced in hypertensive patients.

The exhibit shows that by the end of this decade there will be 60 million Americans over 65—half of whom will be hypertensive—and emphasizes that hypertension in the elderly differs from that in younger people. For example, specific characteristics in the elderly with hypertension include decreased blood flow and impaired heart function, a contracted blood volume and low blood flow to the kidneys.

The exhibitor was Dr. Franz H. Messerli of the Ochsner Clinic in New Orleans. The exhibit, "High Blood Pressure in the Elderly," was one of more than 100 scientific exhibits on display at the annual convention and scientific assembly of the American Academy of Family Physicians.

A message from . . .

The President

COST CONTAINMENT VS. QUALITY OF CARE

According to recent polls, it is apparent that the No. 1 health care concern of both physicians and society as a whole is the increasing cost of medical care. This has generated a series of "cost containment" committees, established amidst cries of alarm from the business community, the media, labor groups and the political establishment. There is *also* serious concern among physicians and other health care professionals, such as hospital administrators. These cost containment commissions have been established with an avowed purpose of "cutting the cost of health care" but, they, in general, seem to have been composed of representatives of business, labor, consumers, politicians and insurance with precious little input from health care professionals. In all this rhetoric of "cost containment," I am disturbed to find that there is very little attention paid to "quality" of care.

To a certain extent, we in Medicine have been victims of our own successes. Life expectancy has increased. Infant mortality has decreased. The quality as well as the quantity of life has been vastly improved. Procedures and innovations such as surgical and medical ICU, CCU, neonatal centers, joint replacement, coronary artery by-pass surgery, intraocular lens implantation, renal dialysis and transplants for end-stage renal disease, aggressive chemotherapy for patients with previously quickly-fatal malignancies, to name but a few, have improved quality as well as quantity of life for many over the past two decades. Even the heretofore much maligned CAT scan has proved itself to be an efficient and cost-effective diagnostic procedure.

These advances do not come cheap, nor are they the result of efforts of politicians, bureaucrats, Ralph Nader's consumer groups, or even the *Washington Post*. These advances were made by the medical profession in response to our stated goal of improving the quality and quantity of society's health and well-being.

Cutting health care costs, per se, is not difficult. If I, or for that matter, any other physician, were given dictator-like powers, I expect we could cut health care costs in half starting tomorrow morning. The end result would be: survival rate and life expectancy would go down; infant mortality would go up; and most people would not enjoy the improvements of the quality of life from the advances outlined above. In effect, we could ration medical care, but this would indeed cut costs.

Please understand that I am not in favor of continuing the spiraling increase of health care costs. I feel it is a subject that must be addressed by health professionals and society as a whole. We are told that 10 per cent of our gross national product is too high a price to pay for the best medical care available anywhere in the world today. If this is the case, then society must decide what percentage is appropriate. As a concerned profession, however, we must provide the input and education so that the buzz-words "cost containment" do not become a euphemism for rationing quality of care. If society as a whole accepts the concept of rationing medical care, then this is its choice; but we must be ever-vigilant to inform the public exactly what the choices are. If we fail to do this, then we have failed in our duty to safeguard the public health and welfare.

Increasing health care costs are a serious problem, but, in a headlong rush to lower these costs, our profession must be ever-mindful of encroachment on quality of care and insist that high-quality health care be available to all, not just to those fortunate families rich enough to afford it.

Harry Shannon MD

Harry Shannon, M. D., *President*
West Virginia State Medical Association

The West Virginia Medical Journal

Editorials

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Is it logical to believe that anyone outside the physician community really is qualified to assess the quality of medical care? Certainly the great majority of doctors would say "no" in resounding fashion.

PHYSICIAN REVIEW

But there seems to be a continuing commitment by the Reagan Administration to the death of a physician review program—and the American Medical Association House of Delegates has leaned in the same direction. At least, the AMA has urged elimination of all government-directed peer review programs—and those have represented physician review.

The whole issue of professional review has come to the front again. Recent congressional action gave the PSRO Program another year of funding to the extent of more than $72 million. Congress also has told the PSROs still functioning that they will receive priority consideration in an emerging new Medicare review program.

The key words here, however, are "priority consideration"—and physicians well can be concerned that this assurance might not be around for long. In fact, the so-called new Durenberger legislation might be the last chance, in the view of many physicians, for doctors to retain the capacity to assure quality in delivery of care to Medicare patients.

Government spokesmen say the Reagan Administration's position has been to request repeal of PSROs because regulations inplementing them were burdensome and not effective. But those same spokesmen insist that nowhere has it been said that review is not necessary. Review, they have added, is an integral part of the Medicare Program.

That brings us to the "Durenberger Bill," identified with the Minnesota Senator who sponsored it, which will supersede the old law creating the PSRO Program in the early 1970s. This act, the Reagan Administration says, will provide a chance to rethink the way peer review has been done.

The new law provides the federal government with a year to strengthen its capabilities. Physician-sponsored organizations will be preferred contractors with the government during that year to provide professional review. *However, at the end of the year, contracting will be opened up to fiscal intermediaries.*

All in all, details of how the new review program will emerge remain hazy. New structures coming into being probably will be called "peer review organizations (PROs)." Most probably will be administered on a statewide basis with—for now—physician organizations like the West Virginia Medical Institute, Inc., to be given priority consideration by the federal government as designated PRO entities.

Actually, however, there are two kinds of organizations that can get a piece of action in the next 12 months or so. Along with physician organizations will be others with so-called "access" to physicians.

The general hope should be that, as the new review program unfolds, practicing physicians are in the forefront. Also, hopefully, existing PSROs, foundations for medical care and medical societies will be the review organizations, thus ruling out third-party payers.

Everything still is going to narrow down to who is the best judge of quality medical care. The reasonable answer, of course, is physicians. Some administration spokesmen have indicated a clear preference for review by third-party payers who rely on billing information.

Some individuals say it was the poor performance of third-party carriers in the 1960s that brought PSROs, and physician review, into existence. PSROs indeed have been controversial, too, largely because of government pressure to use them as cost containment vehicles at the expense of the quality of care review capability they were designed to have.

Physicians must watch closely the new review developments—and they need to make every effort to assume, or keep, responsibility for that review.

It's hard to believe the years have passed so quickly, but the Mid-Winter Clinical Conference will offer its 16th scientific program January 21-23. And once again, it promises to be the premiere continuing medical education offering of the year.

NUMBER 16

With the West Virginia University and Marshall University Schools of Medicine as co-sponsors with the State Medical Association, the conference will be moved in January to the new Marriott Hotel in Charleston.

The scientific program, to run from Friday afternoon through Sunday noon, has been developed in *The Journal's* news section as the planning committee has put it together over the past several months. Only the final trappings need to be put into place.

The conference always has emphasized the kinds of presentations that give those physicians who attend—and the number has shown a steady growth over the years—important scientific information they can use when they return to their offices on Monday.

That format is assured for No. 16. Topics always reflect in some measure, at least, what physicians who register in previous years have suggested, with the planning committee maintaining a year-around alert as to other new discoveries and trends in medical care.

Most physicians perhaps feel, like Dr. A. D. Forker of Nebraska—writing in that state's medical journal recently—that the best CME is at the bedside, with "patients teaching physicians much more than physicians teach physicians." But Doctor Forker had these additional thoughts, too:

"On the other hand, if you do not reflect upon your decisions, diagnoses and treatment; go about your practice habits just as you did 20 years ago; don't have knowledgeable associates and consulting physicians with whom to discuss current topics, and rarely go to a CME meeting, then I suspect you really are providing a lower quality of care.

"In fact, if you fail to follow a sensible educational pattern, and forget CME altogether, you might as well take up gardening, bridge-playing, collecting stamps or some other leisure pursuit, and leave the practice of medicine to someone else."

We'll deal further with the subject in upcoming issues, but physicians need to be aware of a new development in the health care provider field

NOW, THE PPO

—specifically, the appearance of Preferred Provider Organizations (PPOs).

PPOs can be groups of hospitals or physicians which contract on a fee-for-service basis with employers, insurance carriers or third-party administrators to provide comprehensive medical care to subscribers.

Actual organizational patterns can vary. So far they have shared common characteristics such as "provider panels" made up of a limited number of physicians and/or hospitals; negotiated fee schedules, frequently considered "discounts;" utilization and/or claims review; freedom of choice for consumers, who are not "locked in," and quick turnaround on payment of provider claims.

PPOs identified to date, in such states as California and Colorado, have consisted of panels of providers—hospitals and physicians in various combinations. Where hospitals have been the organizational focus, they have enlisted their own medical staffs or extended staff privileges to other physicians in their communities.

When medical groups have been the organizational hubs, panels of primary care physicians have utilized a network of participating hospitals and referred patients to affiliated specialists.

The only agreement that has bound participating consumers has been that each time a designated service is provided by a panel, it has been offered at a previously agreed-on fee. There has been no prepayment or capitation amounts paid to the providers, in contrast to Health Maintenance Organization (HMO) procedures.

Each time a patient has sought health services, he or she has decided whether to use a PPO or non-PPO provider, and has remained covered by an existing indemnity schedule. Financial rewards, such as a waiver of copayments/deductibles or improved benefits, usually have been offered to attract the patient to the "preferred" provider.

As indicated, we'll cover other details later. But PPOs can have profound implications on medical staff membership and organization. And, of course, there will be a host of legal questions of many kinds among the various states.

GENERAL NEWS

Additional Specialists Join Mid-Winter Faculty

A surgeon, pediatrician, psychiatrist, and cardiologist have been added to the list of speakers being announced by the Program Committee for the 16th Mid-Winter Clinical Conference.

James W. Kessel, M. D.

The Program Committee also has announced the speaker and panelists for the physicians' session of the conference on "The Doctor, Quality Control and Professional Liability" (see accompanying story).

The annual continuing medical education program will be held in Charleston January 21-23 at the new Marriott Hotel, located at 309 Lee Street, East.

Sponsors are the State Medical Association and the Marshall University and West Virginia University Schools of Medicine.

Sessions will be held Friday afternoon, January 21: Friday evening, Saturday morning and afternoon, and Sunday morning (ending at noon).

Also scheduled during the conference are 5 o'clock "Meet the Faculty" cash bars following the afternoon sessions on Friday and Saturday; some 13 scientific exhibits on display in a room adjacent to the main meeting hall; and a public session on sports medicine held concurrently with the Friday evening physicians' session. A talk on sports medicine also is planned for physicians Saturday morning.

The speakers currently being announced are Drs. James W. Kessel, Charleston surgeon, who will speak on "Trauma Transport;" Martin R. Klemperer, Professor and Chairman, MU Department of Pediatrics, "Heritable Immunodeficiency Diseases—New Prospectives;" William H. Nelson, Associate Professor of Psychiatry, University of Connecticut, Farmington, "Use and Abuse of Tricyclic Antidepressants," and Robert C. Touchon, MU Associate Professor of Medicine and Chief of Cardiology, Department of medicine, "Calcium Channel Blockers."

Doctor Kessel will speak Saturday morning; Doctor Klemperer, Saturday afternoon, and Doctors Nelson and Touchon, Sunday morning.

As announced previously, the following additional speakers and topics will be on the program:

Friday Afternoon: "Diagnostic Tests in Hepatitis"—Robert H. Waldman, M. D., WVU Professor of Medicine and Acting Dean, School of Medicine; "Vaccines in the Treatment of Hepatitis"—Larry I. Lutwick, M. D., Associate Professor of Medicine, State University of New York, Downstate Medical School, New York-Brooklyn, and Director, Division of Infectious Diseases, Maimonides Medical Center, Brooklyn; and "Herpes"—Jack M. Bernstein, M. D., MU Assistant Professor of Medicine;

Saturday Morning: "Joint Replacement"—J. David Blaha, M. D., WVU Assistant Professor of Orthopedic Surgery, and Chief, Section of Arthritis Surgery;

Saturday Afternoon: "New Developments in Prenatal Diagnosis"—R. Stephen Amato, M. D., Professor of Pediatrics and Medical Director of the Affiliated Facility for the Developmentally Disabled at WVU; and "Nephrotic Syndrome in Children"—Roberta Gray, M. D., MU Associate Professor of Pediatrics;

William H. Nelson, M. D.

Robert C. Touchon, M. D.

Sunday Morning: "Lens Replacement" — George W. Weinstein, M. D., WVU Professor and Chairman, Department of Ophthalmology.

A native of Ripley, Doctor Kessel was graduated from WVU, and received his M. D. in 1974 from Jefferson Medical College in Philadelphia. He served a three-year residency in surgery at Mercy Catholic Medical Center in Philadelphia, a two-year residency at WVU Charleston Division, and completed a trauma fellowship in Baltimore in 1979-80.

Doctor Klemperer has been in his present MU post since 1981, coming there from the University of Rochester (New York), where he was Professor of Pediatrics and Medicine. He also has held teaching posts at Emory University and Harvard Medical School.

Currently serving on the Editorial Board of *American Journal of Pediatric Hematology-Oncology*, Doctor Klemperer was graduated from Dartmourth College, and received his M. D. degree from New York University School of Medicine in New York City. He interned at the University of Rochester, served a residency there and at Children's Hospital Medical Center in Boston, and completed a fellowship in medicine (hematology) at the latter institution.

He is the author of some 80 scientific articles and abstracts.

Former WVU Faculty Member

Doctor Nelson, Associate Professor, Department of Behavioral Medicine and Psychiatry at WVU from 1979 until June of this year, also is Chief, Ambulatory and Consultation Psychiatry at the Veterans Administration Medical Center in Newington, Connecticut.

He was graduated from Duke University, and received his M. D. degree in 1972 from WVU.

Doctor Nelson completed a residency at the University of Connecticut, then was a staff psychiatrist at Silver Hill Foundation and in part-time private practice in New Canaan, Connecticut, from 1975 to 1979.

His current research is in clinical use of the Dexamethasone Suppression Test, and in neuroendocrine parameters in major depression and alcoholism.

Doctor Touchon came to MU this year from Durango, Colorado, where he was Chief, Department of Medicine, at the Mercy Medical Center/La Plata Community Hospital.

M. D. from St. Louis University

A native of California, Doctor Touchon was graduated from Occidental College in Los Angeles, and received his M. D. degree in 1965 from St. Louis University. He took his internship and residency at Santa Barbara (California) County General-Cottage Hospitals, and completed cardiology fellowships at St. Vincent's Hospital in Los Angeles and at the University of California at Los Angeles.

Doctor Touchon also held cardiorespiratory and other posts at hospitals in Anaheim and Yorba Linda, California.

(continued on next page)

A Look At Quality Control And Liability Planned

Such topic areas as quality control in Medicine and professional liability of doctors will be explored by a speaker and panel during the physicians' session of the 16th Mid-Winter Clinical Conference.

The session, "The Doctor, Quality Control and Professional Liability," will be held at 8 P. M. on Friday, January 21, in Salon D, Grand Ballroom, at the Marriott Hotel in Charleston.

The principal speaker will be Gary A. Banas, an attorney with the firm of Buckingham, Doolittle & Burroughs Co., LPA in Akron, Ohio.

Banas has organized and spoken to many seminars on medical malpractice for doctors, hospital administrators and lawyers. He received his law degree from Western Reserve Law School in Cleveland, and has been with the Akron firm since 1976.

The attorney also is a lecturer for the Ohio State Law Institute throughout the state on the subjects of evidence, rules of civil procedure, and depositions.

Panelists will be Tom Auman, Director of Professional Liability, McDonough Caperton Shepherd Group, Charleston; Fred Bockstahler, Director of Patient Affairs, Charleston Area Medical Center (CAMC); James C. Crews, President, CAMC; Jack Leckie, M. D., Huntington, Chairman, Committee on Insurance, State Medical Association, and John F. Wood, Huntington attorney.

Presiding for the physicians' session will be Joseph T. Skaggs, M. D., Director of Medical Affairs, CAMC, and Chairman of the conference Program Committee.

The program meets the criteria for 14 hours of credit in Category 1 of the Physician's Recognition Award of the American Medical Association, and is approved for 13 Prescribed hours by the American Academy of Family Physicians.

A registration fee of $50 will be charged all registrants except nurses, medical students, interns and residents. For advance registration, make checks payable to West Virginia State Medical Association, and mail to the Association at P. O. Box 1031, Charleston 25324.

Room Reservations

The Charleston Marriott is holding a block of rooms for conference attendees, *and reservations should be made by January 3.* Those who register for the conference in advance will receive from the Association a postage-paid Marriott reservation request card specifically designated for the conference. Persons making reservations directly with the hotel — in order to receive group rates — should specify that they will be attending the Mid-Winter Clinical Conference. Group rates are $48 for a single room and $54 for a double.

Members of the Program Committee are, in addition to Doctor Skaggs, Drs. William O. McMillan, Jr., and C. Carl Tully, both of Charleston; Richard G. Starr, Beckley; Maurice A. Mufson, Huntington, and Robert L. Smith, Morgantown.

The Program Committee is receiving continuing assistance from WVU Charleston Division staff members J. Zeb Wright, Ph.D., Coordinator of Continuing Education, Department of Community Medicine; and Sharon A. Hall, Conference Coordinator.

Remaining speakers and final program details will be presented in the January issue of *The Journal.*

Medical Examiner Named

Dr. Ronald Crisp of Martinsburg has been appointed to fill the vacant medical examiner position in Berkeley County. The announcement was made recently by Dr. Irwin M. Sopher, Chief Medical Examiner of West Virginia.

Doctor Crisp recently moved to Martinsburg from Chicago. He is a member of the staff at City Hospital in Martinsburg, and is associate medical director of a local nursing home.

FTC Role As To Professions Back Before Congress

With the return of Congress to Washington for its "lame duck" session (set to begin November 29), both House and Senate face again the pending issue of whether state-regulated professions, such as Medicine, are to be under Federal Trade Commission jurisdiction.

On the Senate side, doctors and others seeking to assure that the FTC shall not have such jurisdiction need to urge their lawmakers to support retention of Section 3, as approved by the Senate Commerce Committee, in S. 2499. That language provides that the FTC does NOT have jurisdiction over the professions.

Also in the Senate, those opposed to FTC authority need to support language in the next continuing appropriations resolution (if Congress extends FTC authority through such a resolution) that would prohibit use of funds by the FTC to regulate the professions.

In the House, physicians should be aware that a so-called Broyhill substitute amendment to H. R. 6995 (the FTC reauthorization bill) could create new problems by granting jurisdiction to the FTC over the professions and by authorizing the FTC to pre-empt state medical practice and other professional regulatory acts merely on a finding by the FTC that the laws were related to business or commercial practices and might negatively affect competition.

Those opposed to FTC authority over the professions thus need to urge members of the House to reject the Broyhill amendment. At the same time, they should urge support of the Luken-Lee amendment to H. R. 6995 which would prohibit the FTC from exercising jurisdiction over the professions unless given specific authority by the Congress to do so.

Action in both Senate and House can come early in December. U. S. Senators Robert C. Byrd and Jennings Randolph of West Virginia can be reached by addressing any communications to them in Washington, DC. 20510.

Congressmen Robert H. Mollohan, Cleve Benedict, David M. Staton and Nick Joe Rahall II can be reached at the Washington, DC 20515 address for the U. S. House of Representatives.

Continuing Education Activities

Here are the continuing medical education activities listed primarily by the West Virginia University School of Medicine for part of 1982 and 1983, as compiled by Dr. Robert L. Smith, Assistant Dean for Continuing Education, and J. Zeb Wright, Ph. D., Coordinator, Continuing Education, Department of Community Medicine, Charleston Division. The schedule is presented as a convenience for physicians in planning their continuing education program. (Other national, state and district medical meetings are listed in the *Medical Meetings* Department of The Journal.)

The program is tentative and subject to change. It should be noted that weekly conferences also are held on the Morgantown, Charleston and Wheeling campuses. Further information about these may be obtained from: Division of Continuing Education, WVU Medical Center, 3110 MacCorkle Avenue, S. E., Charleston 25304; Office of Continuing Medical Education, WVU Medical Center, Morgantown 26506; or Office of Continuing Medical Education, Wheeling Division, WVU School of Medicine, Ohio Valley Medical Center, 2000 Eoff Street, Wheeling 26003.

Jan. 24-28, Snowshoe, Fourth Mid-Winter Cardiovascular Symposium

Regularly Scheduled Continuing Education Outreach Programs from WVU Medical Center/ Charleston Division

Buckhannon, St. Joseph's Hospital, first-floor cafeteria, 3rd Thursday, 7-9 P. M.—Dec.-Feb. (winter break).

Cabin Creek, Cabin Creek Medical Center, Dawes, 2nd Wednesday, 8-10 A. M.—Dec. 8, "Special Teenage Pregnancy Problems," Ward W. Maxson, M. D.

Jan. 12, "Recently Recognized Sexually-Transmitted Diseases," Thomas W. Mon, M. D.

Gassaway, Braxton Co. Memorial Hospital, 1st Wednesday, 7-9 P. M.—Dec. 1, "Common Intestinal Parasites in W. Va.: Diagnosis & Treatment," Kevin Tu, Ph.D.

Jan. 5, "Evaluation & Management of Thyroid Nodules," Richard Kleinmann, M. D.

Feb. 2, "Yes, Virginia, There Are Venereal Diseases in Rural Practices," Patrick Robinson, M. D.

Madison, 2nd floor, Lick Creek Social Services Bldg., 2nd Tuesday, 7-9 P. M.—Dec. 14, "Evaluation of the Comatose Patient," Paul Derboven, M. D.

Jan.-Feb. (winter break).

Oak Hill, Oak Hill High School (Oyler Exit, N 19) 4th Tuesday, 7-9 P. M.—Dec.-Feb. (winter break).

Welch, Stevens Clinic Hospital, 3rd Wednesday, 11 A. M.-1 P. M.—Dec. 15, "Update on Non-Invasive Diagnosis & Management of Cardiovascular Diseases," Allen H. Schaeffer, M. D.

Jan.-Feb. (winter break).

Whitesville, Raleigh-Boone Medical Center, 4th Wednesday, 11 A. M.-1 P. M.—Nov.-Feb. (winter break).

Williamson, Appalachian Power Auditorium, 1st Thursday, 6:30-8:30 P. M.—Dec. 2, "A Long-Term Management of the Diabetic," Stephen Grubb, M. D.

Jan.-Feb. (winter break).

ENT Diagnostic Lab At WVU Offers Viral Services

An E.N.T. Diagnostic Laboratory has been established by the Department of Otolaryngology at West Virginia University Medical Center. The laboratory has been inspected and approved by the American College of Pathologists as part of the clinical laboratories at University Hospital.

Although the laboratory operates under the auspices of the Department of Otolaryngology, it offers viral services to a variety of clinical specialties. In addition to serology for most common viruses, it offers the following special services:

Obstetrics-Gynecology: Monitoring the status of pregnant women with recent histories of herpes infections (in many cases the laboratory has isolated virus from symptom-free women within the last month of pregnancy); and isolation and identification of virus in cases of suspected herpes infections (24-48 hours after receipt of specimen);

Ophthalmology: Isolation and identification of herpes from corneal scrapings (24-48 hours); and fluorescent antibody identification of adenovirus;

Pediatrics: Services to aid in management of the immune impaired child—functional immune tests (lymphocyte stimulation) and immune markers (E-rosettes, high-affinity rosettes, B-cell rosettes);

Otolaryngology: Epstein Barr services for cases of Monospot negative infections or reactivations (early antigen antibody titers, virus capsid antigen titers, and Epstein Barr nuclear antigen) and Epstein Barr services for recurrent exudative tonsillitis, nonspecific lymphadenopathy, and nonspecific neck masses.

Tests are available at a cost of $35 each, and specimens can be sent through ordinary mail. For details of mailing and billing, contact James E. McClung, ENT Department, West Virginia University Medical Center, Morgantown 26506. Telephone (304) 293-3357.

Review A Book

The following books have been received by the Headquarters Office of the State Medical Association. Medical readers interested in reviewing any of these volumes should address their requests to Editor, *The West Virginia Medical Journal*, Post Office Box 1031, Charleston 25324. We shall be happy to send the books to you, and you may keep them for your personal libraries after submitting to *The Journal* a review for publication.

Current Obstetric and Gynecologic Diagnosis and Treatment, 4th Edition, edited by Ralph C. Benson, M. D. 1,038 pages. Price $25. Lange Medical Publications, Los Altos, California 94022. 1982.

Principles of Clinical Electrocardiography, 11th Edition, by Mervin J. Goldman, M. D. 437 pages. Price $15. Lange Medical Publications, Los Altos, California 94022. 1982.

Correlative Neuroanatomy and Fuctional Neurology, 18th Edition, by Joseph G. Chusid, M.D. 475 pages. Price $15. Lange Medical Publications, Los Altos, California 94022. 1982.

Learning Disabilities Explained, by Stanley S. Lamm, M. D., and Martin L. Fisch, Ph.D., with Don McDonagh. 247 pages. Price $16.95. Doubleday & Company, Inc., 245 Park Avenue, New York, New York 10167. 1982.

$1 Million Grant For Study Goes To MU Doctor

A Marshall University School of Medicine faculty member has received a five-year National Institute of Mental Health grant totaling approximately $1 million to study the long-term treatment of depression with phenelzine.

Pharmacology Department Chairman Donald S. Robinson, M. D., principal investigator for the project, said this will be the first long-term study of this type of antidepressant, which allows the body to overcome deficiences of a chemical which helps regulate emotions and moods.

"Mood disorders are the most common of all medical problems seen in primary care," Doctor Robinson said. "Depression sufferers often have a wide variety of symptoms, such as anxiety, physical complaints and sleeping or eating problems. The illness can be quite disabling without proper treatment.

"Many people have more than one depressive episode in their lifetime," he added. "It's quite important that we determine how often the illness is apt to recur, when it is apt to recur, and whether we can minimize the risk of recurrence."

Doctor Robinson, also MU Professor of Medicine, said that since phenelzine, like most antidepressants, is safe and nonaddictive, it would be a practical drug for long-term maintenance therapy. Other physicians working with him on the study will be Drs. John Corcella, Mildred Bateman and M. Hoback Clark.

Paper Presented

Dr. Romeo Y. Lim of Charleston recently presented a paper on "Use of Carbon Dioxide Laser in Otolaryngology" during the annual Congress of the Southern Medical Association in Atlanta. Doctor Lim is Clinical Associate Professor of Otolaryngology-Head and Neck Surgery at West Virginia University School of Medicine.

The Impaired Physician

Do you know of a physician struggling with a physical or other impairment? Do you believe that the Medical Association's Committee on Physician Services might be of assistance in such an instance? Please contact the Association's office, P. O. Box 1031, Charleston 25324, telephone 346-0551, for any information you desire or feel would be helpful.

Family Medicine Foundation Launched In State

A foundation to promote the specialty of family practice in the state is being organized by the West Virginia Academy of Family Physicians.

The Family Medicine Foundation of West Virginia, authorized by the Academy last June, will have a philanthropic mission with primary emphasis on education. The Foundation will use such programs as a life insurance policy, bought by a member and payable to the Foundation, as one method of soliciting funds, memorials, bequests, and of establishing an Auxiliary.

Other functions of the Foundation will be to support family practice clubs in the state's medical schools, family practice residents' activities, and the educational program of the Academy's annual scientific assembly; and to provide loans and scholarships for needy medical students going into family practice residencies.

West Virginia Academy members and other physicians currently are being asked to make tax-deductible contributions to the Foundation. Checks should be made payable to Family Medicine Foundation of West Virginia, and mailed to the Foundation at P. O. Box 7058, Cross Lanes, Charleston 25313-0058.

The Foundation President is Dr. Robert D. Hess of Clarksburg.

Disabled Doctors Requested To List In Directory

Physicians with a physical disability are being requested to contact a St. Paul, Minnesota, medical foundation so that work may continue on the compilation of a resource directory.

The purpose of the project is to list physicians with various physicial disabilities who are willing to provide information and referral services to physicians who incur the same disability and need specific information.

The directory, started two years ago, will be completed in six to eight months.

All physicians, active or inactive, with any type of physical disability are requested to contact Frank C. Zondlo, M. D., St. Paul-Ramsey Hospital Medical and Educational Research Foundation, 640 Jackson Street, St. Paul, Minnesota 55101.

Medical Meetings

Dec. 2—Am. College of Chemosurgery, New Orleans.

Dec. 4-9 — Am. Academy of Dermatology, New Orleans.

Dec. 5-8 — Interim Meeting, AMA House, Miami Beach.

Dec. 11—MU Memorial Sports Medicine Conference, Huntington.

1983

Jan. 10-12—Am. Society for Laser Medicine & Surgery, New Orleans.

Jan. 20-22—Neurosurgical Societies of the Virginias, Hot Springs, VA.

Jan. 21-23—16th Mid-Winter Clinical Conference, Charleston.

Jan. 29-Feb. 3—Am. College of Allergists, New Orleans.

Feb. 8-12—Am. College of Emergency Physicians, Surgery/Trauma, Detroit.

Feb. 11-13—Biomedical Topics in Psychiatry (Medical College of VA), Hot Springs, VA.

Feb. 18-20—Regional CME Meeting, Am. College of Physicians, Alexandria, VA.

March 20-24—Am. College of Cardiology, New Orleans.

March 25-26—Infection Control Workshop (Monongahela General Hospital, WVU School of Medicine), Morgantown.

April 15-17—WV Chapter, AAFP, Morgantown.

April 17-21—Am. Urological Assoc., Las Vegas.

April 18-22—Am. Roentgen Ray Society, Atlanta.

May 4-7—WV Chapter, Am. College of Surgeons, White Sulphur Springs.

May 8-12—Am. College of Obstetricians & Gynecologists, Atlanta.

May 13-14—Topics in Cardiovascular Diseases (Am. Heart Assoc.), Baltimore.

June 19-23—Annual Meeting of AMA House, Chicago.

Aug. 25-27—116th Annual Meeting, W. Va. State Medical Assn., White Sulphur Springs.

Sept. 29-Oct. 2—Am. Society of Internal Medicine, San Francisco.

Oct. 9-14—Am. College of Surgeons, Atlanta.

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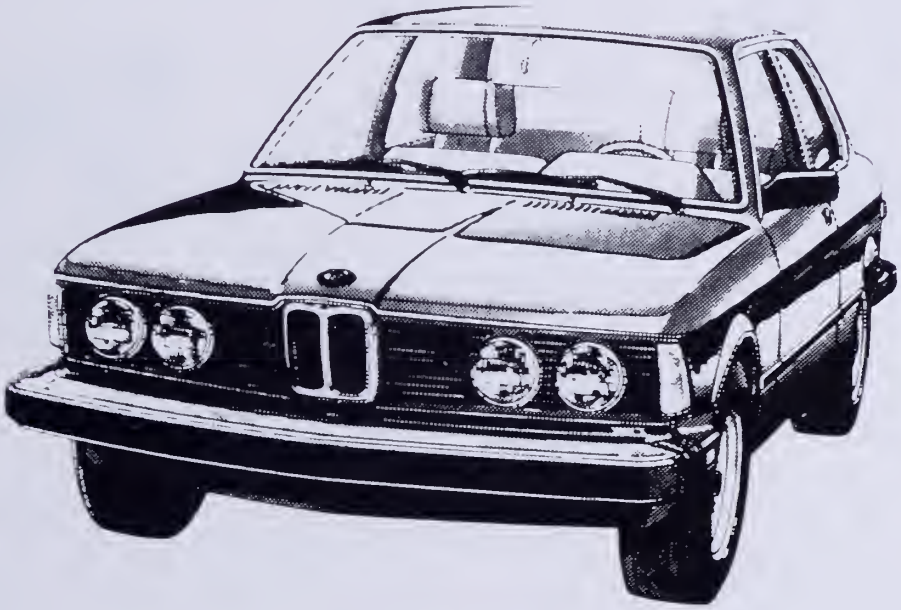

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WVU Medical Center –News–

Compiled from material furnished by the Medical Center News Service, Morgantown, W. Va.

Hospice Movement Spreads Rapidly In State

The hospice movement is spreading rapidly in West Virginia, with five groups already helping terminally ill patients and their families, and four more in the planning stage.

Hospice groups are active in Beckley, Charleston, Huntington, Martinsburg and Wheeling, and others are being organized in Clarksburg, Morgantown, Parkersburg and Putnam County.

"Things are moving so fast it's hard to keep track," said R. John C. Pearson, M. B., Chairman of the Department of Community Medicine who is active in the statewide hospice organization.

The movement reached West Virginia only about four years ago, and has been active in the United States only since the early 1970s, when the first hospice was organized at the Yale University School of Medicine Hospital. Its origins in England go back only 10 years before that.

300 Units in United States

"About 300 units have been formed in the United States since the first opened in 1974," Doctor Pearson said. "This indicates a perception that something was lacking in the care of people who were dying."

Hospices serve as coordinators of the many services needed by terminally ill patients and their families, and can be organized for bed patients, for home care only, or a combination.

"All of the ones in West Virginia are set up on the basis of out-patient home care. That makes a lot of sense because in any one community there aren't going to be many patients, and you can make use of the local hospital for the few who need it," Doctor Pearson said.

A hospice organization needs to offer a mix of services, one that varies considerably because not everyone needs all the services, he noted.

"There are medical needs, social, psychological and spiritual needs. A patient may need help in making out a will, getting food in the house, dealing with the activities of daily living of whatever kind, as well as medical and nursing problems. And the family may need help not only with those problems but with getting a respite from care of the patient and bereavement help later on.

Dignified Circumstances

"The hospice idea includes the whole range of services that patients might need in this phase of their lives," Doctor Pearson said.

"It permits death at home in dignified circumstances. It lets the family get needed relief. It helps with just plain living needs to permit human creativity to come through and to make this more than only a completely saddening experience."

Six Students Named To AOA, Honor Medical Society

Six fourth-year students in the School of Medicine have been elected to Alpha Omega Alpha, the national honor medical society.

Michael T. Angotti, Clarksburg; Lynn H. Harris, Baltimore, Maryland; Richard J. Jackson, Martinsburg; Ralph A. Sellers, Fairmont; Gregory D. Snodgrass, Gauley Bridge, and Daniel W. Wilson, St. Marys, are WVU's newest members of AOA.

They bring the total membership to 13, joining seven from their class who were elected last spring.

The others are Stephen Powell, Scott Depot, President; Anne Cutlip, Morgantown, Vice President; Carolyn Looney, Van Sant, Virginia, Charleston Division Vice President; Linda Gray, Elm Grove; Gary Renaldo, Fairmont; Jack Steel, Barrackville, and Vincent Traynelis, Morgantown.

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Third-Party News, Views and Program Concerns

Cut In Respiratory Care Coverage Advised

Blue Cross and Blue Shield Association, in a major expansion of its Medical Necessity Program, has provided its member plans with guidelines to eliminate unnecessary use of respiratory care.

About 25 per cent of all hospital inpatients receive respiratory therapy, one of the fastest growing components of hospital care, with cost estimated as high as $1 billion a year. In making the announcement, the Association said implementation of the guidelines could save hundreds of millions of dollars annually in respiratory therapy costs.

The guidelines, which were approved by the Association's Board of Directors, also have the endorsement of several national medical organizations within their specialty areas. These are the American College of Physicians (ACP), the American College of Surgeons (ACS), and the American Academy of Pediatrics (AAP).

Definitive Criteria

The guidelines establish definitive criteria for respiratory therapies to help assure quality patient care by ascertaining that the correct procedure is used on the right patient at the proper time.

Procedures covered by the guidelines—all of which can be an effective part of patient care—include intermittent positive-pressure breathing (IPPB), limited and complete pulmonary function tests (PFTs), incentive spirometry, postural drainage, aerosol therapy, arterial blood gas analysis, and oxygen therapy, according to the Association.

"The respiratory therapy guidelines are intended to raise the level of cost-consciousness of our subscribers, physicians and hospitals," said Bernard R. Tresnowski, President of the Association, the coordinating agency for the nation's 103 Blue Cross and Blue Shield Plans.

"Any effort which helps control costs without lowering the quality of care will benefit everyone."

Tresnowski emphasized that the Medical Necessity Program, which previously dealt with outmoded or unproven procedures and tests as well as routine hospital admission batteries, does not mean a reduction in benefits or immediate denial of claims for subscribers. Rather, he said, "Plans will watch patterns of utilization on a hospital-by-hospital basis, and seek changes in these patterns where necessary."

Most Cost Effective

The program is designed, he added, to assure that care received by patients is not only the best available but also the most cost effective.

Commenting on the program, William Y. Rial, M. D., American Medical Association President, said the Association has reviewed a preliminary version of the guidelines on respiratory therapy and has found them to be useful and reliable recommendations.

The new guidelines spell out specific circumstances when use of the various respiratory procedures is appropriate or should be limited. They also identify circumstances when payment for routine use will be limited in the absence of special justification.

Routine Tests Discouraged

For example, many patients routinely undergo pre-operative pulmonary screening, which includes a complete battery of pulmonary function tests, for possible pulmonary disease without regard for either symptoms or history. Under the guidelines, plans are advised not to pay for PFTs unless the patient has a known pulmonary problem, has a history of smoking or an occupational history which might suggest the possibility of lung disease, or unless other special circumstances are identified.

When oxygen therapy is prescribed, documentation of need would be required after certain prescribed time periods of usage for continuation of the therapy in acute myocardial infarctions or other medical emergency situations such as acute pneumonia, pulmonary embolisms, heart failure, drug overdoses or hepatic failure.

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Obituaries

KENNETH J. HAMRICK, M. D.

Dr. Kenneth J. Hamrick of Maxwelton (Greenbrier County) died on October 2 in a Beckley Hospital. He was 85.

A retired surgeon and World War I veteran, he was a former member of the West Virginia State Medical Association.

Survivors include a brother, Henry Hamrick of White Sulphur Springs, and four sisters, Mrs. Sophia Knight and Mrs. Ruth Goal of Pueblo, Colorado; Mrs. Ann Maynard of Scott Depot (Putnam County), and Mrs. Helen England of Alderson.

* * *

CLYDE A. HARPER, M. D.

Dr. Clyde A. Harper of Zephyrhills, Florida, formerly of Clendenin, died on October 6 in a Lakeland, Florida, hospital. He was 92.

A native of Roane County, he practiced in the Clendenin area for more than 50 years with his brother, Dr. O. M. Harper, who died in 1979.

Doctor Harper received his M. D. degree in 1915 from the former Chicago College of Medicine and Surgery, and was a World War I veteran. He was an honorary member of the Kanawha Medical Society, West Virginia State Medical Association and American Medical Association.

Survivors include the widow; three daughters, Mrs. Obyra Quick of Lakeland, Florida; Mrs. Uldena Ellis of Charleston and Mrs. Mary Jane Bond of Huntsville, Alabama; two brothers, Russell Harper of Gandeeville (Roane County) and Tom Harper of Harmony (Roane County), and three sisters, Mrs. Freda Mays of Ravenswood, Mrs. Ava Poling of Kentuck (Jackson County) and Mrs. Hazel Bohn of Willard, Ohio.

* * *

ARTHUR E. GLOVER, M. D.

Dr. Arthur E. Glover of Madison, a Boone County family physician for 50 years, died on October 8 in a Charleston hospital. He was 81.

Born in Little Rock, Arkansas, Doctor Glover received both his undergraduate and M. D. (1929) degrees from the University of Virginia. He interned at the University of Virginia Hospital, took his residency at the former Mountain State Hospital in Charleston, and completed other postgraduate work at St. Louis Childrens Hospital and the University of Buffalo.

Doctor Glover was a member of the Boone Medical Society, serving as President in 1963-64, and a member of the West Virginia State Medical Association.

Survivors include the widow; a son, Jimmy Glover of Madison; a daughter, Mary Ann Dorsey of Virginia; two half-brothers, Gene and Cedric Wirt, both of Little Rock, and one sister, Mrs. Jewell Walker of Tulsa, Oklahoma.

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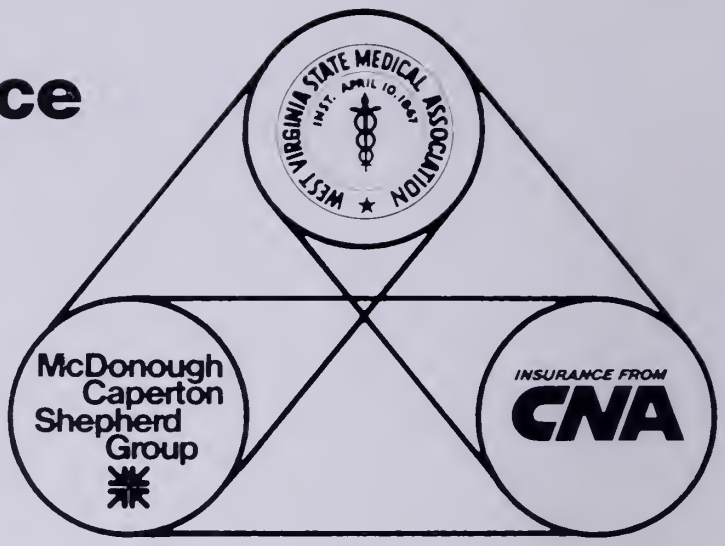

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County Societies

CABELL

The Cabell County Medical Society met on September 9 at the Gateway Holiday Inn in Barboursville.

Dr. Garth Errington, Superintendent of Cabell County Schools, gave an interesting talk, entitled "In Pursuit of Excellence."

The Society met again on October 14 at the Gateway Holiday Inn.

Dr. Atis K. Freimanis, radiologist from Ohio State University, gave an informative talk on CT scanning and ultrasound.

The Society passed a resolution introduced by Dr. Winfield C. John of Huntington which would limit the amount of recovery in West Virignia for any injury of a patient to no more than $500,000. Copies of the resolution were sent to the Governor, Attorney General, members of the State Legislature, President of the State Medical Association, and component societies of the State Association—Maurice A. Mufson, M. D., Secretary.

* * *

JEFFERSON

The Jefferson County Medical Society met on September 1 at the Jefferson Memorial Hospital in Ranson.

It was noted that Dr. L. Mildred Williams of Charles Town had represented the Society at the Annual Meeting of the State Medical Association in August at the Greenbrier.

Two new members were welcomed.—William S. Miller, M. D., Secretary.

* * *

McDOWELL

Dr. Robert B. Buckingham of Pittsburgh spoke on "Current Concepts in the Therapy of Common Arthritic Conditions" at the September 8 meeting of the McDowell County Medical Society.

The meeting was held at the Stevens Clinic Hospital in Welch.

Doctor Buckingham, Associate Professor of Medicine at the University of Pittsburgh, described osteoarthritis and rheumatoid arthritis and their treatment. He also covered nonsteroidal, anti-inflammatory drugs and their advantages and disadvantages.

The Society met again on October 13 at Stevens Clinic Hospital. Dr. Harry Shannon of Parkersburg, President of the State Medical Association, was the guest speaker.

Doctor Shannon discussed the need to improve communication between members and State Association officers, over-regulation of the medical profession, and the public perception of the profession. His talk was well received.

The Society approved a request from Welch Emergency Hospital to support the hospital's Certificate of Need application for a building addition.—Muthusami Kuppusami, M. D., Secretary.

Answers To Review Article Questions

(Questions on Page 310)

1. c. Cornea
2. c. 4 days
3. a. Less than 1mm thick
4. a. Keratoconus
5. b. False
6. d. Diabetes
7. c. Alcoholism
8. d. Double vision
9. a. endothelium
10. b. 10-0 nylon

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I certify that the statements made by me above are correct and complete.

(Signed) Charles R. Lewis,
Managing Editor

Book Review

BASIC AND CLINICAL IMMUNOLOGY, 4th EDITION—Daniel P. Stites, M. D.; John D. Stobo, M. D.; H. Hugh Fudenberg, M. D.; and J. Vivian Wells, M. D. 775 pages. Price $22. Lange Medical Publications, Drawer L, Los Altos, California 94022. 1982.

Since the first appearance of this text in 1976, cover-to-cover familiarity with a current edition has been a recommended part of preparation for board examinations in allergy/immunology. At $22, the 1982 edition is a best buy in a text of its type. Emphasis is on organization and function of the immune system; the sections on immunologic laboratory tests and the clinical chapters are illustrative and "not intended to serve as a manual of clinical treatment." As such this text should appeal to medical students, physicians in training or in practice in fields in which understanding and applications of immunology are of sufficient importance that it is worth going back to study or review the basics, and community hospital medical libraries.

This book is revised at two-year intervals with relatively constant authorship of the various chapters, and it has expanded from 653 to 775 pages since the first edition. Major revisions in the basic immunology section since the first edition include new or extensively revised chapters on autoimmunity; transplantation; tumor immunology; the effect of sex hormones, nutrition and aging on the immune response, and reproductive immunology. Sections on histocompatability, phagocytic cell function and immune mechanisms of tissue injury have been expanded into full chapters. The laboratory section has a new chapter on blood banking and immunohematology, and there is a new clinical chapter on oral and dental diseases. Most other chapters have evolved by expansion to include new material and references.

Libraries and others who use this book for instructional purposes (as with clinical laboratory personnel) may want to replace earlier editions, but as most of the added material comprises illustrative examples rather than changes in understanding of basic immunologic mechanisms, most other owners probably will not find replacement necessary on a cycle of less than eight to 10 years. — Robert E. Coifman, M. D.

(continued on next page)

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Current Pediatric Diagnosis and Treatment is a useful, up-to-date pediatric reference textbook. All major areas are covered concisely in this 1100-page, multi-authored, giant paperback. The chapters are written by experts in the particular specialty. Within each chapter the disease entity is clearly presented but not extensively discussed. The disease entity is presented in an outline format under the subheadings as follows: Essentials of Diagnosis; General Consideration; Clinical Findings (which include laboratory findings), and Treatment and Prognosis.

Further information on a particular subject can be found in the reference following the presentation or in more specialized pediatric texts. Besides the general pediatric-information chapters, there are chapters on the physical examination and growth and development. I liked the last four chapters on drug therapy, fluid and electrolyte therapy, and interpretation of biochemical tests. Laboratory values are given for age-defined limits, and are set forth clearly as to the parameter of measurement.

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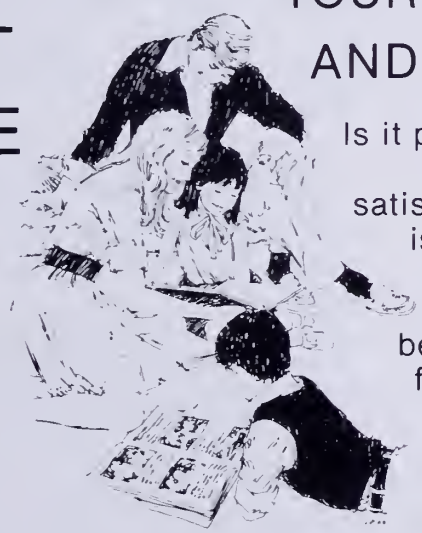

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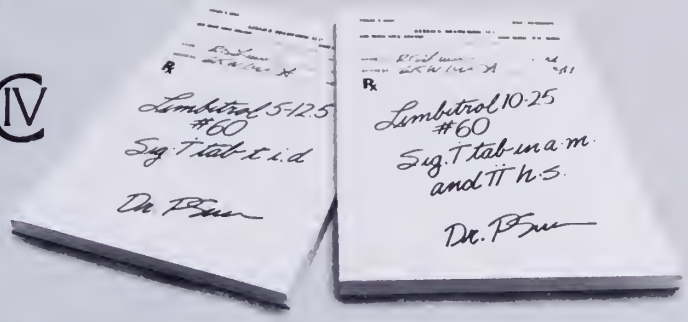

In anxious depression,

SPECIFIC FOR THE NONPSYCHOTIC PATIENT

Fits the picture of anxiety/depression correlation

Most patients with a mood disorder have a mixture of anxiety and depression. One clinician[1] found a correlation of 0.7 in anxiety and depression scores; another[2] has estimated that 7 of 10 nonpsychotic depressed patients are also anxious. For the dual symptomatology of anxious depression, Limbitrol provides dual medication.

More appropriate for the nonpsychotic depressed and anxious patient

Limbitrol contains both amitriptyline, specific for symptoms of depression, and a benzodiazepine, specific for the symptoms of anxiety. Thus it is a better choice than other dual agents for anxious depression that contain a phenothiazine, a class of antipsychotic drugs less specific for anxiety and now generally avoided in nonpsychotic patients.[2,3]

Avoids the risk of tardive dyskinesia carried by the phenothiazine combinations

The causal relationship between the phenothiazines and other extrapyramidal side effects, including tardive dyskinesia, is well established. In contrast, the reported incidence of these adverse reactions with Limbitrol or either of its components is rare.

References: 1. Clagham J: *Psychosomatics 11*:438-441, Sept-Oct 1970. **2.** Rickels K: Drug treatment of anxiety, in *Psychopharmacology in the Practice of Medicine,* edited by Jorvik ME. New York, Appleton-Century-Crofts, 1977, p. 316 **3.** Baldessarini RJ, Tarsy D: Tardive dyskinesia, in *Psychopharmacology: A Generation of Progress,* edited by Lipton MA, DiMascio A, Killam KF. New York, Raven Press, 1978, p. 999

Before prescribing, please consult complete product information, a summary of which follows:
Indications: Relief of moderate to severe depression associated with moderate to severe anxiety
Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use; then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.
Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).
***Usage in Pregnancy:* Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**
Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage; withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline; symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).
Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. Concomitant use with other psychotropic drugs has not been evaluated. sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.
Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, contusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.
The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs:
Cardiovascular. Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke
Psychiatric. Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido
Neurologic. Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns
Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract
Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus
Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.
Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue
Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female and elevation and lowering of blood sugar levels
Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling
Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. I.V. administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.
Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single *h.s.* dose may suffice for some patients. Lower dosages are recommended for the elderly. Limbitrol 10-25, initial dosage of three to four tablets daily in divided doses, increased to six tablets or decreased to two tablets daily as required. Limbitrol 5-12.5, initial dosage of three to four tablets daily in divided doses, for patients who do not tolerate higher doses.
How Supplied: White, film-coated tablets, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) and blue, film-coated tablets, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose® packages of 100, Prescription Paks of 50.

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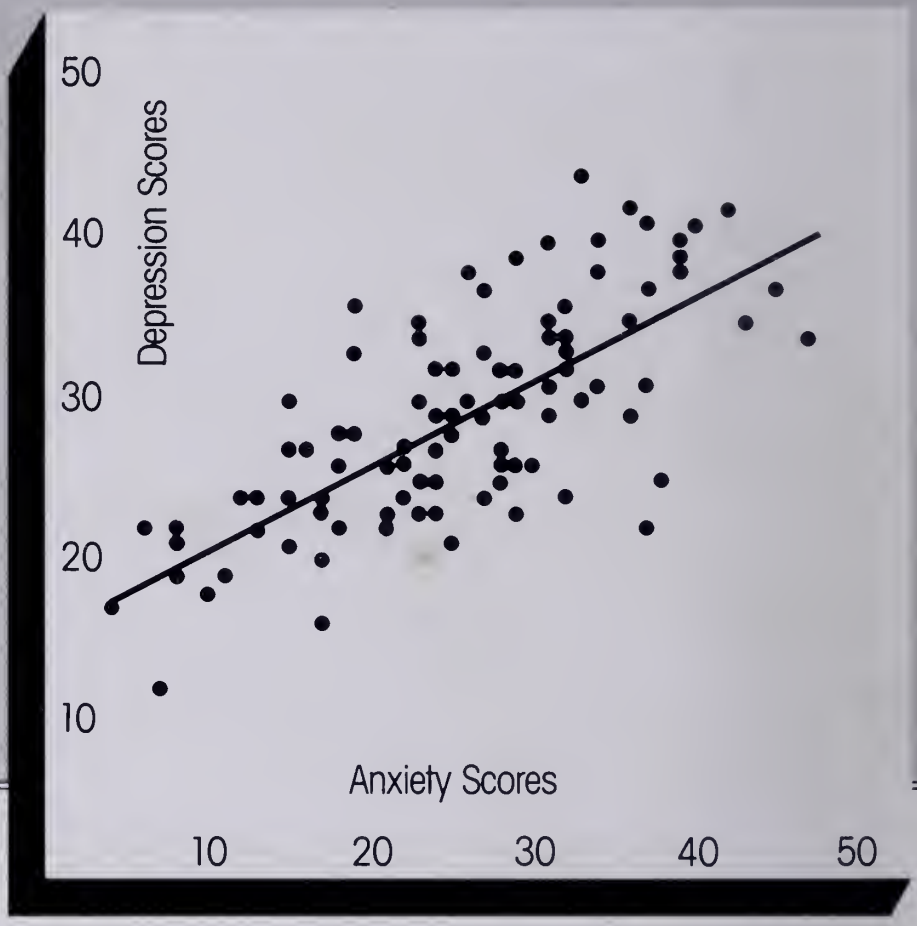

The graph illustrates the close correlation between depression and anxiety derived through the MMPI and the Taylor Manifest Anxiety Scale in 100 nonpsychotic psychiatric patients. The Coefficient of Correlation is 0.7. As depression increased, so did the anxiety levels.
—Adapted from Claghorn J[1]

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1. Claghorn J: *Psychosomatics 11*:438-441, Sept-Oct 1970

Please see summary of product information on inside cover.

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